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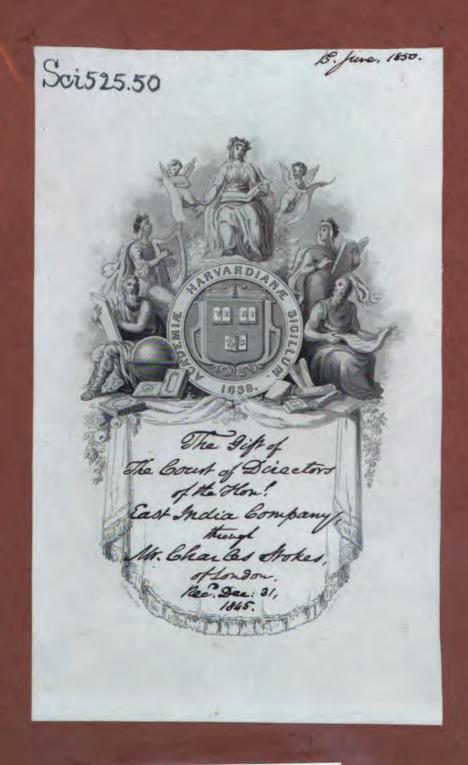
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# RESULT

OF

# ASTRONOMICAL OBSERVATIONS

MADE AT

THE HONORABLE,

THE EAST INDIA COMPANY'S OBSERVATORY AT MADRAS.

RY

THOMAS GLANVILLE TAYLOR, Esq.

ASTRONOMER TO THE HONORABLE COMPANY.

Vol. IV.

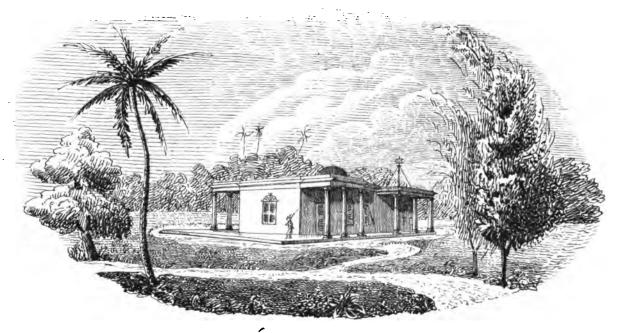
FOR THE YEARS 1836 AND 1837.

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MDCCCXXXIX.

## PREFACE.

THE contents of the present volume differs so little from that found in the former volumes of the Madras Observations, as almost to render a preface unnecessary: to conform however to established customs, it is proper for me to remark, that the Observations on the meridian of which the results are here given, have been continued without interruption—principally by the native assistants, and that those out of the meridian have been made exclusively by myself: In allowing the meridianal Observations to be made by the native assistants, I have been careful frequently to re-examine their bisections with the Mural Circle, and to compare the clock errors from their observations with the Transit Instrument with those determined from my own, when, in no case have I found that their bisections were less accurate than I could have made myself, and the difference between our estimations of time (" personal equation") has seldom amounted to two tenths of a second. The observations of the Sun (which have always proved unsatisfactory -still continue to exhibit the same want of consistency, and my endeavour to discover the cause have—I regret to state not in the least degree proved successful: the observations of the Planet Mars and of Stars situated near to his path for the purposes of Parallax, have now been continued for three successive oppositions, and the necessary comparisons between these and corresponding observations which have been made at the Cape of Good Hope Observatory, have been instituted—without I fear having in the least advanced the object of enquiry: this result, as well as other observations of measuring angular distances with the Mural Circle, tends to shew -that although a single observation may be depended upon to 1", 5 or 2"; still, the tenth or twentieth part of this amountwhich is the present object of enquiry,—can only be attained by an almost unlimited number of observations. The observation of Moon Culminating Stars and occultations has been continued, as has likewise the Eclipses of Jupiter's Satellites, but not having received the corresponding observations at Greenwich complete, I have delayed for the present to attempt any improvement of the supposed value of the Longitude, and since it would have interfered with the observation of the Star Catalogue to attempt reflection Observations, I have likewise allowed the question of Latitude to remain undisturbed. The reductions have for the most part been performed by myself, and when performed by an Assistant, have invariably undergone—either a recomputation, or a careful revision by myself before they were trusted. On comparing the places of the 2066 Stars which are here given, with Piazzi's

Catalogue; a result similar to that noticed in Vol. III. (as occurring between the Catalogue there given when compared with Piazzi) was here too apparent; in consequence of which, I have gone back to the catalogue given in Vol. II. and have likewise compared it with the places assigned by Piazzi; after combining the results from these three catalogues (containing about 7600 Stars) there still appears a tendency to exhibit a General Proper Motion of the fixed Stars, which can be explained, by supposing a motion of the Solar System towards the North Pole of the Ecliptic: whether the data from which this conclusion has been drawn shall appear sufficient or no, I would beg for the present to claim a little indulgence—until a comparison of the table of refractions employed by Piazzi (not now at my command) with those at present in use, shall have been instituted—and a re-examination of Latitudes undertaken;—this done,—I shall be prepared either to announce this important and somewhat unexpected result, with more precision and certainty, or to acknowledge with humility that I have been in error—

T. G. TAYLOR,
H. C. ASTRONOMER.

I take this opportunity to acknowledge with very many thanks, the receipt of copies of the *Connoissance des Temps* and *Nautical Almanac*, as well as other very valuable works from learned Societies and individuals.

Note to the Second Edition. The present edition of this volume has been rendered necessary, in consequence of nearly the whole of the copies of the former edition having been lost in the wreck of the Duke of Northumberland: In the examination of the proof sheets, reference has been had to one of the printed copies of the first edition, from which, with the exception of one or two notes which have been rendered necessary on the present occasion, it differs in no respect whatever.

T. G. TAYLOR,
H. C. ASTRONOMEE.

#### OF THE TRANSIT INSTRUMENT.

The eye piece is furnished with five vertical and one horizontal fixed wires, and one vertical moveable wire; the Equatorial intervals between the former were determined from the intervals occupied by several stars situated near the Pole to pass from wire to wire, as follows:—

	Seconds.
from 1st wire to centre	. +54,577
2d	. +26,961
4th	27,470
<b>5</b> ւհ	.—55,289

rendering necessary the correction.....  $\frac{-0.244}{\cos Decln.}$  to reduce the mean

of the five wires to the centre wire.

These numbers hold good up to the 30th October 1836, when the wires were broken—in consequence of the shutters on the roof of the Observatory being blown open by the violence of the wind, whereby the instrument was exposed for some minutes to very heavy rain; \*—having failed during this time to secure the shutter (the fastenings having given way, and one only out of three hinges remaining entire) I was compelled to take the transit off its axis, and deposit it in the safest place I could find; the wind which was blowing from the North, had burst open the Northern door, as well as the Southern one immediately opposite; hence there appeared to be no other choice—than that of placing it upon the table which stood against the most secure part of the Northern wall of the Observatory;—here, supported by books and a green baize cover, I felt assured that nothing short of the building falling in, would have in the least degree endangered it; at one instant I thought of depositing it upon the floor, where it would be sheltered by the table, but streams of water which were flowing through the Observatory determined it otherwise; -at 5 o'clock in the afternoon having completed all that could be of service to secure the Instruments—I left the Observatory to the care of an assistant. At 1 before 7 it blew a perfect hurricane,—the Dome on the top of the Observatory was blown away, and the stoutest trees and hedges were laid low!at 7 o'clock the wind had much moderated, and at ½ past 7—a lull—a dead calm ensued. I watched the appearance of the sky and fluctuations of the Barometer at this moment with feelings of intense anxiety and interest;—the clouds were passing one another in utter confusion, and although calm below. it was evident that at no great height above the Earth there was a severe conflict among the elements;—I had hardly time to make a note of these appearances and of the height of the Barometer, when the rain-which had ceased during the lull, again set in, accompanied by the sighs and moans of the again returning hurricane:—at a \( \frac{1}{4} \) before 8, the wind—which now blew from the South, had risen to a pitch more fearful than that before experienced; in short—no description can convey an adequate idea of its intense fury;—doors and windows, iron bars and bolts-were with one rude rush scattered and broken! At this moment the southern doors of the Observatory, situated opposite to the northern wall where the Transit Instrument had been deposited—was literally blown to pieces; whereby one of the pieces (about 8 feet by 6 Inches by 2 Inches) which had been blown across the room, had fallen edgewise upon the head of the micrometer attached to the Transit Instrument, and very neatly cut it off, without at all disturbing the other parts of the telescope. Other

<sup>•</sup> There fell 7,5 Inches, in the course of 12 hours—for the indications of the Barometer see the end.

injuries had been sustained—by the books having been disturbed, whereby the object end of the telescope had fallen upon a pile of books from a height of about 2 feet, whence two slight indentations had been sustained, one on each side of the tube, at 10 or 12 Inches above the object end of the telescope; and the tangent screw of the setting circle had been hit: but it was evident that the axis had not in the slightest degree been injured; a circumstance of which I have since well assured myself from observation.—The first fact that struck my notice on examining the Instrument—was, that the focal length of the object glass had apparently altered; or rather that the telescope had become shorter; for, in order to render the principal focus coincident with the wires, it was necessary to remove the object glass, 07 of an inch from the position it had hitherto occupied in the cell into which it was secured;—this remedied (which I was enabled to do by interposing three pieces of brass of this thickness between the bottom of the cell and the frame carrying the object glass) it only remained that the micrometer screw should be replaced; this was readily and very neatly accomplished by Mr. Barrow of Calcutta, and six weeks after the date of this calamity, all was again in order:—in this interval the observations were continued without the micrometer (as will be seen in the sequel,) without I apprehend in any material degree endangering their general accuracy.

Up to the date of these misfortunes the illuminating pivot had always reposed upon the eastern Y or Pillar; but the damage sustained by the tangent screw above noticed, rendering its motion stiff and uncertain, I was induced to shift the position of the axis—so as to bring the other setting circle into use; accordingly from the 5th November to the present time the position of the Instrument has been "illuminating Pivot West."

On the 5th of November I put in a new set of Wires, when—from the mean of several Stars situated near to the Pole, the Equatorial intervals were found to be—

		Seconds.
from	1st wire to centre	.+54,840
	2d	+27,251
	4th	27,828
	5th	54,530

hence to reduce the mean of the five wires to the centre wire, for the fixed



#### ERROR OF LEVEL OF THE TRANSIT AXIS.

4

In volumes I. and II. the value of the micrometer screw had been determined to be 34,366 for each revolution, whereas for that now in use (which I requested Mr. Barrow to make of nearly the same degree of fineness)—one revolution corresponds to 32,94.

It now only remains for me to state another, though trifling circumstance with regard to the Transit Instrument—namely, that after above six years of constant use, the lacquer had completely disappeared from the eye end of the telescope, and existed in patches only on the other parts;—with a view to arrest the progress of oxidation, as well as to improve its now dingy appearance,—on the 22-25th February 1837, I applied two coats of oil paint over the entire surface, whereby its appearance as well as efficiency remains unimpaired.

#### ERROR OF LEVEL OF THE TRANSIT AXIS.

THE error of level of the Transit Axis has been determined as heretofore by the Spirit level, and the necessary correction for error of level applied to each observation; this is true at least for the observations made before the 30th October 1836, and for those made after the 18th January 1837:—for the observations made between these dates—having from time to time adjusted the axis to horizontality, no correction on this account is necessary. The Column (L+P) is obtained from the mean of three readings of the level with the cross level East, and the same number with cross level West, viz. one at each extremity, and one in the middle of the pivots; the value of P or half of the apparent defect of the illuminating pivot which is given at page 1 being applied, leaves the values of L which have been employed in the reduction of the Observations. It must be noticed however that the correction P applies with a contrary effect after the 5th November 1836 to what it did before that date, in consequence of the illuminating or smaller pivot having been transferred from the Eastern to the Western Pier, as has already been stated at page 3.

1836.	Illmtg.	Pivot.	L+P	REMARKS, &c.	1836	<b>5.</b>	Illmtg. Pivot.	L+P	Remarks, &c.
Feb.	4		2,66 ,, 2,84 ,, 3,06 ,, 2,92 ,,	Mean= $\left\{ \begin{array}{l} 3,20  \mathrm{E} \\ 70 \end{array} \right\} \cdot . L=3,90  \mathrm{E}$	April	16 18 19 21 23 25 27 29 13 57 9 11 13 16 18		1,70 ,, 0,55 ,, 2,02 ,,	$Mean = \begin{cases} 0,44E \\ ,70 \end{cases} \therefore L = 1,14E$ Land winds set in.
March	12		2,50 ,, 2,59 ,, 2,59 ,, 1,60 ,, 1,96 ,, 2,15 ,, 2,66 ,, 2,29 ,, 2,61 ,, 2,60 ,, 2,15 ,, 1,72 ,, 1,63 ,, 1,63 ,,	$Mean = \begin{cases} 7,70 \\ 70 \end{cases} \therefore L = 3,35E$	June	20 23 25 27 29 31 2 4 6 8 10 12 14 16 18 20		1,25 ", 1,47 ", 1,32 ", 1,67 ", 1,12 ", 1,26 ", 1,21 ", 1,07 ", 1,37 ", 1,29 ", 0,82 ", 0,17 ", 0,43 ",	•
April	14		1,32 ,, 1,38 ,,	Mean=	July Augus	29 29 1 4 8 10 13 15 18 20 23 27 29		0,93 ,, 0.85	

<sup>•</sup> This is omitted in taking the Mean.



1836.	Illastg. Pivot.	L+P	Remarks, &c.	1837.	Illmtg.	L-P	REMARKS, &c.
August15	East	0,64 E 1,06 "	$Mean = { \begin{subarray}{l} ",05W \\ ,70 \end{subarray}} L = ",65E \end{subarray}$	Feb	West	2,50 E 2,47 "	Mean= $\{ \frac{7}{2}, \frac{47}{70} \} : L = 1,77E$
22 24 27 Sept. 7 9 11 15 17 19 22 23	•••••••••••••••••••••••••••••••••••••••	1,53 ,, 1,20 ,, 1,57 ,, 2,21 ,, 1,83 ,, 1,78 ,, 2,01 ,, 2,15 ,, 1,93 ,, 1,65 ,,		1 1 2 2 March 1 1 2	4 6 7 4 9 3	4,20 ,, 4,37 ,, 4,02 ,, 3,20 ,, 4,11 ,, 4,76 ,, 3,91 ,, 3,21 ,, 3,35 ,, 2,70 ,, 2,79 ,,	(%65F) "
26 29 Oct. 3 6 8 10 12 14 16	•••	2,52 ,, 2,59 ,, 2,12 ,, 2,23 ,, 2,92 ,, 1,69 ,, 1,44 ,, 1,17 ,, 1,81 ,,		2 April	8 1 3 6 9 5 8	1,91 ,, 1,70 ,, 1,62 ,, 1,17 ,, 1,95 ., 1,90 ,, 1,36 ,, 2,41 ,,	Mean= { <sup>3,65</sup> E } ∴ L=2,95E
21 24 26 29 1836.		1,97 ,, 2,03 ,, 1,92 ,, 3,73 ,, L—P	Mean= ${1,93E \atop ,70}$ .: L= ${2,63E}$	]	9 2 5	0,75 ,, 0,66 ,, 0,27 ,, 0,25 <b>W</b>	Mean= $\left\{ \begin{array}{c} 1^{''},57E\\ ,70 \end{array} \right\}$ L=0'',87E
Nov. 5 9 12 18 18 19 22 Decr. 1		2,50 E 2,00 ,,	Do. Do. Very heavy rain and high wind— there fell 17 inches in 36 hours. Adjusted for Level. Do. Do.	1 2 2 2 2 3	8	1,84 ,, 2,69 ,,	Mean = $\{ {}^{0,56}_{,70} \} : L=0,14W$ Hot Land Winds.
1837. Jany. 20 24 1837. Jany. 20 28		0,00 ,, 1,70W 0,10 E 0,22 ,,	Do. Do.  Adjusted for Level.		5	0,93 ,, 0,78 ,, 0,55 ,, 0,07 ,, 1,12 ,, 0,58 ,, 1,23 ,, 0,97 ,, 0,72 ,,	

1837.	Illmtg. Pivot.	L—P.	REMARKS &c.	1837.		Illmtg. Pivot.	L—P.	REMARKS &c.
8	••	1,10 E 0,74 ,, 0,95 ,,		Oct.	9	• •	2,26 E 2,13 ,, 1,90 ,,	
14 17 20		1,47	$ Mean = {0,88E \atop ,70} .L=0,18E$		12 15 18 21 24 27 30	••	1,87 ,, 2,27 ,, 2,60 ,, 2,50 ,, 2,38 ,,	
23 26 29 August 1		1,48 ,, 1,42 ,, 1,03 ,, 0,84 ,,		Nov.	2	••	2,60 ,, 6,78 ,,	Mean= $\left\{ \begin{array}{l} 2,27E\\ ,70 \end{array} \right\}$ L=1,57 E  There fell 8,6 inches of rain.
16 16 19	7l	1,82 ,, 2,41 ,, 1,64 ,, 1,73 ,,			5 8 11	•••	6,82 ,, 6,74 ,, 5,90 ,,	
19 21 22 28 33 Sept.		1,83 ,, 1,90 ,, 1,38 ,, 1,50 ,, 1,86 ,,			14 17 20 23 26	•••	5,56 ,, 5,10 ,, 4,78 ,, 5,18 ,,	
- 6	3¦	1,82 ,, 1,05 ,, 1,75 ,,		Decr.	29 29 5	••	5,09 ,, 4,99 ,,	
1; 1; 1; 2 2 2	5 5 8	1,40 ,, 1,39 ,, 1,26 ,,			11 14 17		5,70 ,,	Mean =
2. 2. 3.		0.84	Mean= $\left\{ \frac{1,45E}{,70} \right\}$ L=0,75E		20 23 20 20		2,25 , 2,50 ,	, ,
Oct.	<u> 3 </u>	2,17 ,,			3		100	,

# ERROR OF COLLIMATION OF THE TRANSIT INSTRUMENT.

---

Having found from experience that the determination of the error of Collimation by inversion of the axis was sometimes liable to uncertainty, (by reason of the great care which is necessary, but which cannot always be afforded, in placing the pivots on their Y's), I have in the present volume, as heretofore, had recourse to inversion for this purpose but very seldom, and then only have employed it as a check upon other methods. In the early part of 1836 the error of Collimation was determined by measuring with the micrometer

screw, the horizontal angular distance between the North and South Meridian Marks, and comparing this result with the previously known true angular distance; thus,—if C represent the collimation error, N',—S' the observed azimuths of the centre wire as affected by C, and N,—S the azimuths as not so affected, we have

the reading of the North Mark = 
$$+N^1 = +N + C$$
  
South do. =  $-S^1 = -S + C$ 

taking the sum, N'-S'=N-S+2C; in which N-S, the true angular distance between the marks being known, we immediately obtain the value of C:—for the value of N—S (= $\theta$ ) there were several measures made in the early part of 1835 (see Vol. III p. 8.) in which it came out 180° 0′ 26°,03 and from 5 Inversions on the 13th January 1836 it came out 180° 0' 25",77; the former result bowever is that which has been employed in the computations. For the observations after 20th March and up to 30th October 1836, the azimuth of the centre wire from the North Mark only has been observed, and in place of the other, an observation has been made on every second or third day with the "Reflecting Collimator." The observation with the "Reflecting Collimator" which has been explained already in Vol. III; —consists in measuring the angular distance (with the micrometer) between the direct image of the centre wire, and its image as reflected from a basin of quicksilver; to accomplish this, I drilled a small hole in the side of the telescope, at obout 6 inches from the eye end, so that the light from a lamp, after passing through it-might fall uninterruptedly upon the wires; -I now introduced a silver speculum into one of the eye pieces, in front of the lens, so that by varying its inclination, the light from the lamp could be thrown perpendicularly upon the wires, whereby their image as reflected from a basin of quicksilver placed underneath the Transit, was nearly as well defined as the direct image; the speculum was suspended upon an axis passing through the sides of the eye piece, by which it could be adjusted to the proper angle, and was furnished with a small elliptical hole (about ,07 of an In. diameter) through which the wires were seen. In the employment of this method, it is indispensably necessary that the centre wire should describe a vertical circle, and that the moveable wire be parallel to it; this latter precaution however would not be necessary—could the bisection be made at the exact point of its intersection with the horizontal wire; but this not being accomplishable in practise, in consequence of the want of light at this part of the field (by reason of the shadow of the aperture through which the observation is made)—it becomes necessary when parallelism cannot be obtained, to allow for its effect:—In the case of the Madras Transit;—since the application of the steel pivots, the adjustment of the moveable wire for parallelism has proved insufficient; hence the readings of the Reflecting Collimator which now follow, are not those immediately read off from the instrument, but the readings as corrected for want of parallelism.

In the table which follows, these corrected readings of the Reflecting Collimator divided by 2, or C + L\* are given; —in which C (as noted above) represents the error of collimation, and L the error of Level. The quantity L + P, is taken from the level observations at pages 5-7, save that for the days intermediate between those on which the level was observed, I have employed corresponding intermediate values. For the observations between the 1st November 1836 and 18th January 1837—having been deprived of the means of measuring angular distances, by the loss of the micrometer, I now placed a small Mark upon the pier which had hitherto supported the old North Meridian Mark, and as nearly as possible in the direction of the meridian; my object was, with the level—to render the amount L=0 by adjustment; and then, the reflecting collimator allowing me to adjust for any amount of Collimation C, the azimuth error would remain the only unknown: hence the observations made in the interval just stated do not require correction for error of Collimation. On the 18th January 1837 having applied the new micrometer, and for convenience sake produced a small collimation error—I recommenced the measurement of the errors of Collimation as they had previously been conducted before the Storm.

Illuminating Pivot East, the reading was  $+13^{\circ},81=(C+L)\times 2$ 

West,  $-5.43 = -C+L-2P \times 2$ 

assuming P = -0",80, we get L = 1",29 E. and C = 5,"61; whereas from the level Observations we find L = 2",11 E; and, from the Observation of the N. and S. Marks, C = 6,"15, and from inversion 6",39.

<sup>•</sup> In Vol. III. page 17 line \$4 st seq., I have committed an unaccountable mistake and an oversight;—1st in stating the reading of the Reflecting Collimator to be  $(C+L+P)\times 2$ ,—and 2ndly, in omitting a correction due to the want of parallelism of the centre and moveable wires. As the numbers stand in Vol. III. they are however right, or very nearly so, in consequence of the correction for want of parallelism amounting to 7 or 8 tenths of a second—nearly that of P;—thus, the reading of the last column or P, should be P+P, 75 P=P. And for lines 1—5 page 18 the following should be substituted—

		Observed	Azimuth	N+S+0		Ref. Col.	T ( D	Diff. or	
18	36.		1	2	REMARKS, &c.	2	L+P	Diff. or C-P	P
		N.	s.	or	•	or	'	1 0-1	ľ
		'''	, S.	С		C+L			
		7	7	"		7	*	"	
Jan.		+38,35	-44,24	+10,07				ł	1
	2	38,15	44,41	9,89				1	
	3	38,18	44,68	9,77	ì	+14,65	+3,52	+11,13	-1,36
	<b>4</b> 5	38,15	44,51	9,84		14,45	3,49	10,96	1,12
	6	38,18 38,08	44,75	9,73				ļ	}
	7	38,18	44,61 44,41	9,90	İ	14,42	2,82	11,60	1,70
	8	38,15	44,58	9,80		14,42	2,02	11,00	1,70
	9	38,25	44,58	9,85	1	!		ļ	i
	10	38,12	44,58	9,78	Mean=9*,84	14,24	2,87	11,37	1,59
	11	37,95	44,55	9,71	, , , , , ,	14,04	<b>,</b> ,,,,,	1 11,01	1,00
	12	38,18	44,45	9,88	i		i	i	Ì
	13	38,29	44,45	9,93	•	{ 14,61 { 14.82	3,54	11,17	1,24
	14	38,15	44,20	9,99	1	14.82	•,•.	)	, -,
	15	38,05	44,03	10,02	ì	14,49	3,51	10.98	0,96
	16	38,18	44,06	10,07		14,16	3,48	10,68	0,61
	17	38,22	44,10	10,07		, , ,	-,	1	.,
	18	38,12	43,82	10,16		}		ļ	
	19	38,05	43,82	10,13		13,65	3,11	10,54	0,41
	20	37,95	44,17	9,90	Mean=9*,99	12,69	3,11	9,58	+0,32
	21	38,35	44,07	10,15		13,29	3,12	10,17	0,02
	22	38,22	44,10	10,07		1	·		
	23	38,29	43,90	10,21	ì				
	24	38,39	44,31	10,06	ļ j	12,36	3,03	9,33	+0,73
	25	38,15	44,03	10,07	1				
	26	38,25	44,07	10,10		12,53	3,15	9,38	+0,72
	27	38,56	43,97	10,31		14,32	3,28	11,04	-0,73
	28	38,32	44,21	10,07		13,13	3,22	9,91	+0,16
	29	38,39	44.41	10,00	Mean=10*,10				
	30	38.29	44,41	9,95	Mean=10",10	12,70	2,88	9,82	+0,13
	31	38,22	44,51	9,87		12,87	2,88	9,99	-0,12
Peb.	1	38,25	44,24	10,02	i	12,78	2,60	10,18	-0,16
	2	38,15	44,27	9,96		10.00	0.00	10.00	0.50
	3 4	38,32 38,36	44,00	10,19		13,29 13,47	2,66	10,63	-0,56
	5	38,12	44,00	9,99	İ	12,77	2,75	10,72	<b>-0,53</b>
	6	38,36	44,17	10,07		14,//	2,84	9,93	+0,06
	7	38,43	44,07	10,07		13,29	9 05	10,34	_015
	8	38,33	44,07	10,19		13,47	2,95 3,06	10,34	-0,15 -0,30
	9	38.18	44,31	9,95		10,7	0,00	10,41	-0,30
	10	38,33	44,17	10,09	Mean=10",05	i !		! i	
	ii	38,33	44,31	10,02					
	12	38,56	44,37	10,11					
	13	38,63	44,71	9,97	i	12,95	2,45	10.50	0,53
	14	38,63	44,41	10,12		12,77	2,39	10,38	0,26
	15	38,73	44,85	9,96	Į	i	,	,,	0,34
	16	38.65	44,85	9,91	1	12,43	2,21	10,22	0,31
	17	38,69	44,85	9,93	1	12,60	2,10	10,50	-0,57
	18	38,56	44,88	9,86			•	, i	•
	19	38,56	44,65	9,77	I took out the				
	20	39,32	45,27	10,04	object glass	11,40	1,60	9,80	+0,24
	21	39,76	45,19	10.30	Mean=9",90	12,43	1,60	10,83	-0,53

		Observed Azimuth		$N+S+\theta$		Ref. Col.	L+P	Diff. or	
183	36.	N.	s.	OF C		2 or C+L		C—P	P
		,	*	7		*		•	
Feb.	22	+39,59		+	'	il		1	
•	23	39,66	45,64	10,03		12,08	+2,05	10,03	0.00
	24	38,98	45.34	9,84		11	' /		0,24
	25	39,15	45,47	9,86		12,43	2,40	10,13	-0,27
	26	39,01	45,37	9 84		13,12	2,66	10,46	0,62
	27	38,91	45,55	9,69		13,29	2,47	10,82	1,13
	28	38,84	45,45	9,72		ll i	'	1	
	29	38,87	45,19	9,86		[]	!	1	
Mar.	1	38,87	45,00	9,95		13,65	2,19	11,46	1,51
	2	38,98	45,02	10 00	Mean=9*,91	12,95	2,40	10,55	0,55
	3	38,87	45,27	9,82	i	12,43	2,60	9,83	0,01
	4	38.94	45,12	9,93		13,12	2,60	10,52	0,59
	5	38,87				13,02	2,60	10,42	ļ .
	6	39,08	<u> </u>			12,69	2,37	10,32	ì
	7	38,87			•	12,26	2,15	10,11	Ì
	8	38,87	44,75	10,08		li		i	i
	9	39,01				11,23	1,72	9,51	i
	10	39,01	44,92	10,06		11,06	1,68	9,38	+0,68
	11	38,81				11,06	1,68	9,38	1
	12	38,94				10,54	1,63	8,91	
	13	38,91	—			105	1	0.00	1
	14	38,91		0.00		10,71	1,32	9,39	
	15	38,77	45,05	9,88		1004	1 200	0.50	1
	16	38,77	45,37	9,72		10,94	1,38	9,56	+0,16
	17	38,52		-		10,71	1,56	9,15	
	18	37,88			36 6 C7	10,02	1,74	8,28	
	19	38,08		! —	Mean of 67	10,20	1,48	8,72	1
	20 21	38,59	45.00	0.75	= +9*,96	10,20	1,48	8,72	1
	21	38,49	45,02	9,75	l	и	<u> </u>	I	1

The extreme difficulty which has hitherto attended the keeping in view of the South Meridian Mark, by reason of the rapid growth of the trees which intervene between it and the Observatory, has at length determined me to give it up altogether; I do this with less reluctance than I otherwise should have done, from the consideration of its instability, and from the persuasion I feel—of the Reflecting Collimator being well qualified to supersede the use of two Marks. If we now take the mean of the values in the last column, we get  $P = -0^{\prime\prime}$ , 40, whereas from a similar number of observations in 1836, Vol. III. it came out— $0^{\prime\prime}$ ,70, and from observations at various times with the spirit level (page 1), we obtained for the value of P,— $0^{\prime\prime}$ , 83; hence the assumption of P, to be— $0^{\prime\prime}$ , 70—which has been done in the following computations, cannot be far from the truth.

	1	i	-	1 1		
				Ref. Col.		
	1836	3.	L+P	2	Diff.	Remarks, &c.
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	~ i	2	or	or	
	İ	I		C+L	C—P	
		!	"	, ,		
	March			+10,02	+9,14	
	march	25	0,88	10,02	9,14	
		26	0,80	9,85	9,05	
		28	0,72	9,85	9,13	
		29	0,86	9,85	8,99	
	April	1	1,05	9,51	8,46	
	l	2	1,10	9,85	8,75	
		4	0,87	10,02	9,15	"
_		6	0,41	10,54	10,13	Mean of $10 = +9,32$
•		7	<b>0,</b> 05	11,23	11,28	0,70
			1 0 01	10,72	9 71	$\therefore C = +8,62$
	1	9	+2,01	9,16	8,71 8,77	1
		11 12	0,39	9,68	9,33	
		14	0,3 <b>5</b> 1,23	10,89	9,66	
		15	0,81	11,23	10,42	
		16	0,40	9,94	9,54	
	l	19	0,31	10,89	10,58	
		20	0,71	10,02	9,31	,
	l	21	1,11	10,37	9,26	Mean of $10 = +9,50$
1	ľ	22	0,76	10,20	9,44	<u>0,70</u>
				1001		∴C=+8,80
		24	0,18	10,71	10,53	i .
		25	0,07	1 <b>0,</b> 20 9,51	10,13	i
		26 27	0,11	10,37	9,62 10,52	
		28	0,15 + 0,13	10,19	10,06	
	May	1	0,60	10,20	9,60	
	ay	2	0,49	10,10	9,61	
		3,	0,38	10,10	9,72	
		4	0,27	10,10	9,83	
		6	0,20	10,44	10,24	Mean of $12 = +9,86$
		7	0,25	9,08	8,83	— ,70
		9	<b>0,50</b>	9,16	9,66	∴C=+9,16
		,,	1.00	12,95	12 07	Hot land winds set in.
		11 13	1, <b>02</b> 1,70	12,26	13,97 13,96	1100 1000 11100 000 1110
		16	0,55	12,20	13,90	
l		20	1,25	10,56	11,81	
		23	1,47	10,97	12,44	
-		25	1,32	1		Mean of $6 = +1^{\prime\prime},21$
		27	1,53	12,43	13,96	<b>—</b> 0,70
						∴C +12,51
i		31	1,12	11,23	12,35	
	June	2	1,47	9,68	11,15	
İ		5 8	1,23	10,89	12,12	
		11	1,07 1,33	11,23 12,07	12,30 13,4 <b>0</b>	
		15	0,67	14,16	*14,83	
1			0,07		- 1,00	<u> </u>

<sup>•</sup> This is omitted in taking the Mean.

183	6.	L+P	Ref. Col.  2  or  C+L	Diff. or C—P	Remarks, &c.
June	17 18 20	0,35 0,17 0,43	+ 12,60 11,75 11,06	" + 12,95 11,92 11,49	Mean of $10 = +12,15$
	21 25	0,68 0,89	11,40 10,89	12,08 11,78	$\therefore C = \frac{-0.70}{+11.45}$
July	29 1 4	0,85 1,05	10,54 11,23	11,39 12,28	
	7	+0,15 $-0,16$	11,02 12,01	*10,87 12,17	
	8	0,46	12,08	12,54	
	12	0,62	12,95	13,57	
	13 18	0,62	12,26	12,88	
	19	0,73 0,46	12,60 10,89	13,33 11,35	
	20	<b>0</b> ,19	11,43	11,62	Mean of $10 = +12,29$
}	21	0,31	11,43	11,74	— 0,70
	00	0.40			$\therefore C = \overline{+11,59}$
1	<b>2</b> 3	0,43	10,37	10,80	,
l	25 27	0,26	11,45	11,71	
l	29	0,10 + 0,26	11,57	11,67 10,45	Mean of $6 = +11,10$
1	31	0,06	10,46	10,40	-0,70
Augu		-0,l4	11,40	11,54	$\therefore C = \overline{+10,40}$
		·			The observations with the reflecting col-
i	111	+0,54	12,43	11,89	limator from the 11th to the 27th August
1	12	0.50	11,45	10,86	were made by my assistant Annutachary,
l	13 14	0,59	12,07	11,48	to whom I had confidently entrusted them
l	15	0,64	11,57	10,98 10,33	during my absence from Madras;—having
ì	16	0,85	10,0	10,00	on the 29th discovered a strange difference from the observation made on the 27th by
	16 17	,	11,31	10,46	the assistant; I requested him to examine
i	18	1,06	10,80	9,74	my bisection, when—the cause of disagree-
	19	1 50	10,45	0.00	ment was fully explained, by his reading
1	22 23	1,53 1,36	10,80	9,27	off the complimental number of divisions
i	23 24	1,30	10,28 10,37	8,92 9,17	from the micrometer head instead of the
1	26		10,71	9,33	true;—I might readily by allowing for this, set the matter right, but since the collima-
1	27	1,57	10,63	9,06	tion error appears unchanged, I have pre-
1	28				ferred cancelling the ref. coll. observations.
	29		14,32	12,93	1
Sept.	6 7		14,24	12,85	
1	9	2,21 1,83	14,32	12,49	
İ	11		14,32	12,49	<u> </u>
1	13	1,83	14,83	13,00	
1	15	1,87	15,18	13,31	
i	17	2,01	15,18	13,17	
	19	2,15	15,36	13,21	

<sup>•</sup> This is omitted in taking the Mean.

1836.	L+P	Ref. Col. 2 or C+L	Diff. or C—P	Remarks, &c.
	+1,93 1,65	+ 15,36	+ 13,43	
26 29 Oct. 1	2,52 2,59	15,01 14,83	12,49 12,24	
23 26 29 Oct. 1 2 3 6	2,36 2,12 2,23 2,92	15,18 15,01 15,35	13,06 12,78 12,43	Mean of $14 = +\frac{12,86}{0.70}$
10 12	2,23	12,60 13,38	10,37	$\therefore C = \frac{-0.70}{+12,16}$
14 16 19	1,44 1,17 1,81	13,12 13,12 12,95	11,68 11,95 11,14	
21 24 26 29	2,03 1,92	12,95 13,21 13,29 14,66	10,98 11,18 11,37 10,93	Mean of $9 = +\tilde{1}1,25$ - 0,70
30	0,70	11,00	10,00	$\therefore C = \frac{0,70}{+10,55}$

A hurricane had shattered the S. E. door of the Observatory to pieces, and broken the micrometer screw of the Transit Instrument—

1836.

Nov. 5, Put in a new set of wires and adjusted the collimation of the centre wire by means of the reflecting collimator.

9, Exa	mined the pos	ition of the a	xis of collima	ation by the s	ef. coll.—foun	d correct.	
12,	do.	do.	do.	do.	-		
17,	do.	do.	do.	do.			
22,	do.	do.	found	l the wire a li	ttle to the E. a	diusted it.	
Dec. 1,	do.	do.	found	l the wire a li	ttle to the E. ac	liusted it.	
6,	do.	do.	do.		d correct.	•	
9,	do.	do.	do.	do.	do.		
13,	`do.	do.	do.	do.	do.		
21,	do.	do.	do.	do.	do.		
24,	do.	do.	do.	do.	do.		
1837.							
Jany. 2,	do.	do.	found	d the wire a li	ttle to the E. a	djusted it.	
9,	do.	do.	do.	_	d correct.	•	
14,	do.	do.	found the wire a little to the E. adjusted it.				
18, I pt	irposely move	d the wires					

			Ref. Col.		
183	7.	L—P	${2}$	Diff.	Remarks, &c.
i			or	or_	ĺ
			C+L	C+P	
Jan.	18	+2,67		-13,45	
1	22	2,61	9,45	12,06	
1	25		10,34	12,89	
17.3	31		9,51	11,66	3,40
Feb.	4 7	2,50	8,31	,	Mean of $7 = -11,48$
!	10	2,47 4,20	7,00 5,84	9,47 10,04	P = -0.70
1	10	4,20	10,62	14,82	$C = -\overline{10,78}$ By invers. $C = -10,04$ Increased the coll. error.
1	14	4,37	10,63	15,00	increased the con, error.
1	16	4,02	11,28	15,30	•
l	21	3,20	30.00		Painted the Transit Instrument.
ļ.,	27	4,11	10,63	14,74	
Marc	n 4 9		10,52	15,28	
1	13	3,9 <b>1</b> 3,21	11,11 11,60	15,02	
1	17	3,35	10,95	14,81 14,3 <b>0</b>	Installable said during all on Class C. 1
ļ	21	2,70	11,93	14,63	Inverted the axis twice, when C was found —14",82
1	24	2,79	12,59	15,38	I took out the object glass to remove a screw
1	28	3,16	11,76	14,92	which was rattling about on the inside of
i	31	1,91	13,27	15,18	the telescope; the screw appeared to be-
April	3	1,70	13,58	15,28	long to the rackwork motion employed
1	6 9	1,62	14,90	16,52	for moderating the light;—after which
i	12	1,17 1,95	14,65 13,66	15,8 <b>2</b> 15,61	by inversion I found $C = -14'',50$ .
ļ	15	1,90	13,08	13,01 14,98	
1	18	1,36	13,08	14,44	
Ĭ	18	2,41	11,44	13,85	Mean = -15,07
1	24	1,04	14,44	15,48	P = -0.70
1	07	6.09	1100	10.01	$\therefore C = \overline{-14,37}$
i	27	0,88	11,93	12,81	
May	3	1,38 0,78	11,93 12,35	13,31 13,13	
l'ilay	6	0,75	12,35	13,10	
ł	30 3 6 9	0,66	12,93	13,59	,
i	12	0,27	12,43	12,70	Mean of $7 = -13,09$
1	15	-0,25	13,25	13,00	P = -0.70
1	7.0		,,,,		$\therefore  C = -12,39$
1	18 21	+0.07	11,44	11,51	Hot land winds set in.
ì	24	0,74 1,00	10,83 10,67	11,57 11,67	
1	27	0,16	10,07	11,10	•
	30	1,84	11,52	13,36	
June	2	2,69	10,73	13,42	
1	5 8	0,93	11,19	12,12	"
1	8	0,78	11,44	12,22	Mean of $10 = -11,94$
İ	11 14		11,11	11,66	P = -0.70
1	4.3	0,07	10,70	10,77	∴ C —11,24
	17	1,12	11,35	12,47	
					I was a second to the second t

	—-ī		<del></del> _	i	1
ł			Ref. Col.		
183	7.	L+P	$\frac{1}{2}$	Diff.	REMARKS, &c.
Ì	I		or	or	
			C+L	C+P	
June	20	+0,58			
1	23	1,28	11,77	13,05	
l	<b>2</b> 6	1,23	11,44	12,67	i
1	29	0,97	11,10	12,07	
July	2	0,72	11,44	12,16	
	5		10,45	11,55	
1	8		11,60	12,34	"
1	11	0,95	11,11	12,06	Mean of $10 = -12,23$
	14	1,21	10,86	12,07	P = -0.70
1	17	0.00	,,,,	77.00	$\therefore C = -\overline{11,53}$
ĺ	17 20	0,88	11,11	11,99	
l	<b>2</b> 3		11,60	13,07	On this day I left Madras, for the purpose of
1	<b>2</b> 6		10,37	11,85	making observations of the magnetic dip and
1	<b>2</b> 9	1,03	10,29 10,13	11,71 11,16	intensity, towards the South, along the coast
Augus		0,84	10,94	11,78	of India; the observations of the reflecting
B	4		10,62	12,44	collimator were made during my absence by Ragavachariar Bramin.
į	7	2,41	10,29	12,70	i itagavacnariar Dramin.
1	10	1,64	10,29	11,93	
l	13	1,73	10,78	12,51	
1	16	1,83	11,44	13,27	
1	19	1,90	11,52	13,42	
j	22	1,38	10,45	11,83	."
1	25		9,46	10,96	Mean of $16 = -12,28$
1	28		10,86	12,72	P = -0.70
	31	1,82	11,27	13,09	$C = \overline{11,58}$
Sept.	3		13,58	14,63	I should hesitate to employ these numbers,
1	6		13,17	14,92	from the strong probability they exhibit of
1	9 12	1,45	13,99	15,44	error having been committed in the readings
i	12	1,40	13,83	15,23	of the reflecting collimator - were it not that
1	15	1,39	12,10	13,49	the following note is appended to the observa-
i	18	1,26	12,27	13,53	tion of the 3d September by the Assistant Ragavachariar Bramin. "The equal distances
1	21	0,91	11,62	12,53	from wire to wire is broad than before."*
1	24	0,84	10,29	11,13	j with the wife to broke their begins. "
	27	1,60	11,60	13,20	•
1_	30	0,50	11,44	11,94	
Oct.	3	2,17	11,77	13,94	
i	6		12,11	14,37	
ļ .	9	2,13	11,52	13,65	
1	12 15		11,44	13,34	
i	18		11,19 11,69	13,06	
1	21	2,60	10,62	13,96 13,22	
1	24	2,50	10,86	13,36	
1	27	2,38	11,02	13,40	
1	30	2,60	10,94	13,54	u u
Nov.	2	6,78	5,67	12,45	Mean of $18 = -13.14$
1	5	6,82	5,67	12,49	P = -0.70
					$\therefore C = -\frac{7}{12,44}$

Given verbatim et litteratim from the Level Book.

1837.	L+P	Ref. Col. 2 or C+L	Diff. or C+P	Remarks, &c.
Nov. 8 11 14 17 20 23 26 29 Dec. 2 11 14 17 20 23 26 29 29 29	5,90 5,56 5,10 4,78 5,18 5,29 5,00 5,09 4,99 5,33 5,70 3,58 2,85 2,85 2,25 2,50 2,40	-5,18 5,34 5,18 6,00 6,50 5,89 5,51 5,67 5,51 5,43 5,87 5,95 7,90 7,98 10,12 9,79 9,79 9,46	" -11,92 11,24 10,74 11,10 11,28 11,07 10,80 10,67 10,60 10,42 11,20 11,65 11,48 10,83 12,37 12,29 12,19 11,45	Mean of $18 = -11'',29$ P P C $\frac{-0,70}{-10,69}$

In the reduction of the observations, these mean values of C, together with the reduction to the centre wire (given at pages 1—3), and the correction for Diurnal Aberration, have been applied to each observation; thus, for any day in December 1837, the correction in time  $=\frac{-\frac{,706}{,053+\frac{,020}{,020}}}{\sin N. P. D.} = \frac{0,7798}{\sin N. P. D.}$ 

#### ERROR OF AZIMUTH.

If the Transit Telescope be directed to the north horizon, the deviation of the centre wire from the meridian mark is represented by N + C,—(where C represents the error of collimation); and, if a represent the angular deviation of the meridian mark from the meridian,—

The deviation of the centre wire from the Meridian as exhibited by the North Mark will be  $=\pm a \pm N \pm C$  similarly——South Mark will be  $=\pm a' \pm S \mp C$  and the mean result will be  $a=\pm a' \pm N \pm S$ 

In Volume III p. 20, the value of  $a-a^{1}$  was found 93",52, and, since we have found (page 5) the value of  $a + a^{1}$  to be -26",03, we may state the North

Mark to be situated 33°,74 to the West of the Meridian, and the South Mark to be situated 59",77 to the East of the Meridian.

The observations of 1836 furnish a few transits of Polaris with which we will now re-examine the above values—

POLARIS.

100			)bser	ved	or.	ation:	Correct	ion for	Mean Right	Ascension		
183	<b>5.</b>	Transit.			Clock Error.	Aberration &c.	Level.	Colli- mation.	January 1, 1836.			
Dec.	24 25 26 27 28 29	h. 1	m. 2	8. 2,87 2,99 7,27 7,17 8,99 9,71	15,98 17,37 18,10	8 +3,99 4,81 5,61 6,38 7,13 7,82	3 —2,47	8. +23,75	16,19 19,01 18,85 20,03 20,71	a <sup>i</sup> a <sup>ii</sup> a <sup>iii</sup> a <sup>iv</sup> a <sup>v</sup>	× 2,370	
183	30 31 6. 2			8.75 6,82 8,53	19,10 20,80 21,83	8,50 9,20 10,64	<b>—2,31</b>	+25,44	19,43 16,50 21,47	a <sup>vi</sup> a <sup>vii</sup> a <sup>ix</sup>		
	3 4 6 7			8,08 9,50 4,33 3,83	22,82 23,48 23,23 22,20	11,40 12,19 13,91 14,80			19,79 21,34 18,14 19,56	a <sup>xi</sup> a <sup>xii</sup> a <sup>xiii</sup>		
	8 10			59,27   56,67	20,62 18,08	15,69 17,39			17,47 19,11	a <sup>rv</sup> a <sup>rvi</sup>	-	

where a', a", &c. represent the Azimuth errors in seconds of space.

POLARIS. S. P.

183	5	Observed		or.	Aberration &c.	Correc	tion for	Mean Right Ascension			
100	<b>J</b> .	]	fransit.	Clock Error.	Aberi	Level.	Colli- mation	January 1, 1836.			
		h.	m. s.	m. s.	8.	8.	8.	h. m. s.			
Dec.	25	13	2 25,00	-1, 14,35		+1,95	<b>—23,75</b>	$  13 \ 0 \ 54.07 \ -a^1 \times 2.40$			
i	26		22,95	16,15	6,00	i		$51,00  a^{\mu} $			
!	27		23,31	16,67	6,75			51,59 a <sup>111</sup>			
İ	28		21,48	17,73	7,47	l	[	49.42 a''			
1	29		24,53	18,55		ļ		52,34 a'			
1	30		27,82	19,90	8,85	l		54,97 a <sup>-1</sup>			
183			′ (	·	•	1		•			
Jan.	1		28,93	21,50	10,29	+1,83	-25,44	54,11 aviii			
	3		27,67	23,24	11,80	1 ' '	'	52,62 a <sup>x</sup> —			
	5		26,88	23,30		ì	1	53,45 a <sup>nti</sup> —			
l	6		29,35	22,71	14.36	i		57,39 a <sup>xtsi</sup> —			
			_0,0			<u> </u>					

We have found above, that any value  $a_1 = \frac{a \pm a'}{2} + \frac{N \pm S}{2}$ ; in which,—substituting for  $\frac{N-S}{2}$ , the values found at page 10 &c. we determine.

1835 December 24 — 
$$a = 42,27 - \frac{a-a'}{2}$$

25 —  $a^{i} = 42,27 - \dots$ 
26 —  $a^{ii} = 41,25 - \dots$ 
27 —  $a^{iii} = 41,33 - \dots$ 
28 —  $a^{iv} = 41,45 - \dots$ 
29 —  $a^{v} = 41,43 - \dots$ 
30 —  $a^{vi} = 41,26 - \dots$ 
31 —  $a^{vii} = 41,23 - \dots$ 
1836 January 1 —  $a^{vii} = 41,29 - \dots$ 
2 —  $a^{iv} = 41,28 - \dots$ 
3 —  $a^{v} = 41,43 - \dots$ 
4 —  $a^{vi} = 41,33 - \dots$ 
5 —  $a^{vii} = 41,33 - \dots$ 
6 —  $a^{viii} = 41,34 - \dots$ 
7 —  $a^{viv} = 41,30 - \dots$ 
8 —  $a^{vv} = 41,36 - \dots$ 
10 —  $a^{vvi} = 41,35 - \dots$ 

employing these values of a, a' &c. with the above observations, we obtain the

### MEAN A. R. OF POLARIS, JAN. 1, 1836.

From observations at the superior culmination.

From observations at the inferior culmination.

h. m. s. "  $^n$ 1 19,03 + (41,46 -  $\frac{a-a^1}{2}$ ) × 2,370 = 1 0 53,10 - (41,45 -  $\frac{a-a^1}{2}$ ) × 2,408 from which we readily deduce  $a-a^1 = 93$ ",76; or a = 33",87 and  $a^1 = -59$ ",89, agreeing very nearly with the hitherto supposed values. In the reduction of the Observations from January 1st to March 16th 1836, the Azimuth correction has consequently been computed from the formulæ  $\frac{N-8-92^{\mu},76}{2}$ 

For the remaining days of the month of March, and up to the end of October 1836,—in consequence of the difficulty of keeping the South Mark in view, (as has been already explained), the distance of the centre wire from the North Mark, or  $\alpha + N + C$  only, was observed; (in which,  $\alpha$  has been assumed 33",87 as just found, and the values of C have already been given at p. 11 &c). On the 3rd November 1836,—being deprived of the means of measuring the distance of the centre wire from the meridian mark,—as a temporary measure, I adjusted it to the eastern side of it, (as being more nearly in the meridian than its centre); finding however that the azimuth corrections was still inconveniently large,—on the 22d November the Instrument was adjusted to a temporary circular disc, which I had caused to be affixed to the pier which had hitherto supported the old mark; I had intended to have placed this new mark "in the meridian", but from some mistake in the measurement, an alteration of only half the required amount was made;—to remedy this, on the

<sup>•</sup> Mean A. R. January 1, { 1836 1 1 6,06 22,15

8th December 1836, I adjusted the Instrument to another mark—(a parallelogram), which I had caused to be permanently affixed to the pier, at a still further distance from the old mark, towards the east; this being conveniently situated,—from the 8th December 1836 I have continued to adjust the centre wire when necessary to the mark, instead of measuring as hitherto its distance from it. Calling a\*, the azimuth from the meridian, of the side of the old mark, to which the instrument was adjusted from the 3d to the 22d November inclusive; a', the azimuth of the circular disc employed from 23d November 1836 to 17th January 1837, and a, the azimuth of that since employed we can,—from the observations of *Polaris* made about this time, compute their values.

POLARIS.

183	06			rved	ا ع		Aberration	Correc	ction for	Mean Right Ascension
100	50		Crar	nsit.	کّ	Error.	&c.	Level	Colli- mation.	January 1, 1837.
	_	h.	m.		m.	8.	8.		1	h. m. s.
Nov.	7	1		31,00		- ,	<b>-17,55</b>	• • • •	• • • • •	1 1 49,80 $-a^* \times 2,368$
	9			39,00		27,99	16,92	• • • •		50,07
Ì	10			45,00		24,11	16,58	••••	••••	52,34 ——
į	11			47,00		21,57	16,23	•••		52,78 ——
1	12		U	49,00	'	19,65	15,87	••••		52,78
Dec.	5		1	18,00	0	24,78	4,56	• • • •		$38,23 - a' \times 2,370$
İ	6			23,65		19,50	3,93	• • • •	•	39,22 —— ——
1	7		1	31,67	0	16,60	3,29	• • • •		44,98 —— ——
l	10		1	27,20	١٥	4,25	1,37			$30,08 - a \times 2,370$
!	ii!			23,00	Ιŏ		0,72			25.61 —
l	12			25,00	Ö	- 7	0,05			27,19
l	17		1	25,10	i	2,73			<b> </b>	30,25 — — — 31,54 — —
l	18		1	21,00	1	6,42	4,12	••••		31,54
1	19		1	16,00	1	10,12	4,82	••••		30,94
ł	20		1	10,00	1	13,67	5,55			29,22
l	21		1	8,00	1	17,22	6,28	• • • •		31,50
1	23		1	0,00		24,46	7,77	• • • •		32,23
1	24	0		56,00		27,88	8,50	• • • •	••••	32,36
Ì	26			50,00		34,52	9,98	••••		34,50 ——
	31		59	28,00	1	49,40	13,81	• • • •		31,21 ——
183					١.	<b>=0.0</b> 0				22.50
Jan.	2			20,00		53,39	15,40	• • • •	j	28,79 —— ——
ı	3			19,00		54,12	16,21	• • • •	••••	29,33
i	4			15,00		55,88	17,01	••••	J ••••• }	27.89 —— ——
l	5	,		12,00	1	56,76	17,81	••••	••••	26.57 —— —— 28,09 —— ——
1	6	1		12,00 14.00	- 1 	2,50	18,59 19,40	••••	••••	32.00 —
1	7 8		2	8,50	li	1,40 0,05	1 I	••••		28.65 —
İ	9		2	6,17		58,60	<b>20,20 20,</b> 99	••••	••••	28,56 —
i	10			10,50		57,10	21,78	• • • •		35,18 —
	111		2	5,25		55,60	22 57			32,22 ——
1	12		$\tilde{\tilde{2}}$	2,75		53,66		••••		32,46 — —
l	-~		~	~,,,,	ľ	50,00	~0,0.			-
<u> </u>	<u>'</u>				<u></u>		<u> </u>		<del></del>	

#### POLARIS S. P.

Transit.   Error.   \$\frac{1}{2} \frac{3}{4} \   Level.   \frac{\text{Collimation.}}{\text{mation.}} \   January 1, 1837.	1000	Observed	Clock	ation:	Correc	tion for	Mean Right Ascension
Dec. 20   13 0 55,75   +1 15,44   +5,92     13 1 17,11—a × 2,408   16,37—	1836.	Transit.	Error.	Aberr	Level.		
11 1 50,50 0 54,63 22,97 18,84—	26 1837 Jan. 2 3 4 5 6 7 8 9	13 0 55,75 12 59 30,00 12 59 14,00 59 13,00 59 3,25 13 2 4,33 1 59,00 1 52,17 1 51,25 1 55,25 1 50,75	+1 15,44 1 36,00 1 53,75 1 55,00 1 56,32 -1 3,63 1 1,95 1 0,62 0 59,32 0 57,85 0 56,21	8. +5,92 10,37 15,81 16,61 17,41 18,20 18,99 19,80 20,59 21,38 22,17			13 1 17,11—a × 2,408 16,37—  23,56— 24,61— 16,97— 18,90— 16,04— 11,35— 12,52— 18,78— 16,71—

Taking the mean, we have from

Mean A. R. Polaris January 1, 1837.

			h. m	. 8.
5 observations above Pole	••••	• • • •	1 1	$51,50 \pm a'' \times 2,368$
3 ——— —	••••	•••	1 1	$40,81 \pm a' \times 2,370$
23	• • • •	••••	1 1	$30,28 \pm a \times 2,370$
12 ——— below —	• • • •	••••	13 1	$17,65 + a \times 2,408$

For the determination of  $a^r$  and a' we must now employ the already found mean place for January 1, 1837 = 1h. 1m. 22,15s.

when 
$$a^* = 12^*,40$$
 West  $a' = 7^*,87$  —  $a = 2^*,64$  —

As a confirmation of the value of a, I have lately measured the angular distance between the old mark and the one now in use, when, from the mean of several measures—

The new mark appeared to be situated 31",29 to the East of the old mark. The old mark we have found to be [33",87 West of the meridian.

... The new mark is situated 2",58 West of the meridian.

And for a confirmation of the situation of the mark which gave rise to the value a'',—this I find to be situated 21'',97 East of the old mark.

The old mark is situated 33",97 West of the meridian. = 11",90 West of the meridian.

We will now proceed with the values of N & S given at page 11 &c. to compute the values of (A,) the deviation in Azimuth—

1836.	n—s	A or N—S—93',76	Remarks, &c.	1836.	N—S	A or N—S—93',76	Remarks, &c.
Jan. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Feb. 1 2	1 22,59 22,56 22,86 22,66 22,93 22,69 22,59 22,73 22,83 22,70 22,50 22,63 22,74 22,35 22,08 22,24 21,94 21,87 22,12 22,42 22,32 21,94 22,32 21,94 22,32 22,19 22,70 22,18 22,32 22,19 22,70 22,18 22,32 22,53 22,53 22,53 22,53 22,53 22,70 22,73 22,49 22,42	5,61 5.61 5,48	Mean of $10 = -5^*,21$ Mean of $10 = -5^*,74$ Mean of $10 = -5^*,64$	Feb. 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 23 24 25 26 27 28 29   March 1 2 3 4 8 10 15 16	1 22,36 22,29 22 60 22,50 22,47 22,49 22,50 22,64 22,93 23,34 23,58 23,50 23,54 23,44 23,44 23,21 24,59 24,95 25,30 24,32 24,62 24,38 24,62 24,38 24,62 24,38 24,62 24,38 24,62 24,38 24,62 24,38 24,62 24,38 24,62 24,38 24,14 24,06 23,62 23,93 23,82 24,14	5,56 5,41 5,21 5,36 5,09 5,13 5,11 5,16	Mean of $10 = -5^{*},63$ Mean of $9 = -5^{*},26$ I took out the object glass to clean it.

The South Mark being invisible (by reason of trees having grown in the way), the observation of the North Mark only will be attended to in future.

1836.	N	С	N-C- 33',87 = A	RIMARKS.	1836.	N	С	N—C— 33',87 = A	Remarks.
Mar.22 23 24 25 26 28 29	38,39 38,32 38,42 38,18	••	-4,07 4,37 4,10 4,17 4,07 4,31 4,41		Mar 30 31 April 1 2 3 4	38,39 38,39 38,32 38,18	• •	-4,17 4,20 4,10 4,10 4,17 4,31 4,31	Mean of 10 = - 4°,20

1836.	N	С	N-C- 33",87 = A	Remarks.	1836.	N	С	N-C- 33",87 = A	REMARKS.
April 6		+ 8,62	4,24			+43,13	+12,51	_3,25	
8		8,80	4,34 4,45		30 31	43.13		2,19	
9 10	38,46 38,25	••	4.01 4,42		June 1	43,21 43,34		2,11 1,98	
11	38,36	••	4.31	Mean of $10 = -4^{\circ},27$	3	43,13		2,19	
12 13	37,91 37,98	••	4,76 4,69		4 5			2,26 1,98	
14	38,29		4,38		6	43,95	••	1,37	
15 16	38,42 38,35	••	4,25 4,32		7 8	43,56 43,45		1,76	
17	38,65	••	4,02		9	43,56		1,87 1,76	
18	38,39		4,28		10 11	, -	•	1,76	
19 <b>20</b>	38,42 38,29	••	4,25 4,38		12	43,24 43,49	••	2,08 1,83	
21	38,18	!	4,49	Mean of $10 = -4^{\circ},38$	13	43,31		2,01	Mean of 14 = - 17,94
22 23	38,49 38,46	9,16	4,18 4,57		14 15	43,13 42,65	••	2,19 2,67	
24	38,70	3,10	4,33		16	42,62	• • • • • • • • • • • • • • • • • • • •	2,70	
25	38,78	[	4,25		17 18	42,83		2,49	
26 27	38,81 38,87	::	4,22 4,16		19	42,96 42,89	• • •	2,36 2,43	
28	38,66		4,37		20	43,13		2,19	
29 30	38,52   38,66		4,51 4 37	Mean of 10 = - 4,37	21 22	42,99 43,28	• •	2,33 2 04	
May 1	38,29		4,74	Micau OI 10 == - 4",07	23	42,86		2,46	Mean of $10 = -2'',39$
2	38,22 38,66	••	4,81 4,37		24 25	42,86 42,76	••	2,46 2,56	
4	38,49		4,54		26	42,96		2,36	
5	38,42		4,61		27 28	42,96	••	2,36	
6	38,35 38,35	::	4,68 4,68		29	42,99 42,86	11,59	2,33 2.60	
8	38,94		4,09		30	42,89	•••	2,57	
9 10	38,84 41,07	12,51	4,19   5,31		July 1	42,62 43,21	••	2,84 2,25	
11	41,97	12,01	4,41	Mean of $10 = -4^{\circ},57$	2 3	43,13		2,33	Mean of $10 = -2^4,47$
12 13	41,68		4,70		4 5	42,89		2,57	
14	42,00 42,24		4,38   4,14		[ 6]	43,06 43,24		$2,40 \mid 2,22 \mid$	
15	41,79		4,59		7	43,17		2,29	
16 17	41,61 41,93	:: 1	4,77 4,45		8 9	43,14 43,31	::	2,32 2,15	
18	42,30	- :	4.08		10	43,31		2,15	
19 20	42,33 42,65			Mean of $8 = -4'',39$	11 12	43,31 43,31	••	2,15	
21	42,72	••	3,73 3,66		13	43,59		2,15 1,87	Mean of $10 = -2^{7},23$
22	42,86	•• ]	3,52		14	43,41		2,05	
23 24	42,86 42,96		3,52 3,42	<b>!</b>	15 16	43.66 43,73	::	1,80 1,78	
25	42,89		3,49		17	43,83	[	1,63	
26 27	42,93 42,86		3,45 3,52		18 19	43,91 43,76		1,55 1,70	
28	43,03	::	3,35	•	20	43,73		1,73	
	_ ′ ]	<u> </u>			} <u> </u>				

1836.	N	С	N—C— 33",87 = A	Remarks.	1836.	N	С	N-C- 33',87 = A	Remarks.
Luly 91	+43,66	# +11.50	_1,80		Sep. 0	+43,21	# 	<b>-2,82</b>	
22	43,54	, 11,50	1.92	Mean of $9 = -1^{\circ},77$	10	43,31		2,72	
23	43,54		0,73		ii			2,90	
24	43,38		0,89		12			3.03	
25			0,71		13	42,39			Mean of $10 = -2^{4},75$
26	43,59		0,68		14			3,26	•
27	43,63	••	0,64		15			2,75	
28	,		0,68		16			3,00	
30		•••	0,40		17			2,86	
31	43,69 43,48	• • •	0,58 0,79		18			2,83	•
Aug. 1	43,66	••		Mean of 10 = - 0*,67	19 20			3,00	
3		::	0,64	10 U ,07	21	43,31 43,03		2,72 3,00	
4	43,31		0,96		22			2,65	,
5			0,93		23	43,31		2.72	Mean of $10 = -2^{4},88$
6			0,75	İ	24			2,59	- 2 ,00
7	43,34		0,93		25			2,66	
8	43,17		1,10		26			2,72	
9	43,69	••	0,58		27	43,03		3,00	
10			0,58		28			2,97	
11			0,93	25	Oct. 2			3,15	
12 13		••		Mean of $10 = -0^{\circ},83$	3		•••	2,64	
13			0,26 0,61		4	43,00		3,03	
15		•••	0,75		5 6	43,38 42,96		2.65 3,07	
16	43,69	• • •	0,58		7	43,13	•••	2,90	
17	43,80		0,47		8		:	2,72	
18	43,83		0,44	i i	9				Mean of $13 = -2'',81$
19			0,37		10			5,24	,,,,,
20			0,47		11			5,14	
21	43,69		0,58		12	39,45	••	4,97	į
22	43,59			Mean of $10 = -0'',52$	13		••	4,87	į
23		••	0,37	J	14		••	4,90	
24	- ,	••	0,64		15		••	4.66	
25 26		••	0,64		16		••	•3,96	
20 27		12,16	0,58	Mean of $5 = -0^*,59$	17			4,66	
28			1,69	mican or 0 = - 0,09	18 19			4,49 4,63	
29			1,96		20			4,90	
30			1,89		21			4,49	
31	44,07	••	1,96		22			4.56	Ì
Sep. 1	44,08		1,95		23	39,79	• •	4,63	,
2	43,87		2,16		24	39,59		4,83	
3	43,90	••		Mean of $7 = -1^{\circ},96$	25	39,67		4.65	
4	43,21	••	2,82		26		••	4,39	
5	43,48	••	2,55		27	40,18		4,24	
6	43,55	••	2,48		28		••	4,06	
7 8	43,76	•••	2,27		29	39,66	••	4,76	Mean of $19 = -4'',68$
8	43,21	••	2,82	·					

<sup>\*</sup> This is omitted in taking the Mean.

On the 3rd November 1836 the centre wire was brought to touch the edge of the North mark; hence, from this date up to the 21st November 1836 the Instrumental error in Azimuth was North 12,40 West.

On the 22d November I adjusted the centre wire to bisect a mark which had been erected to the East of the above;—hence, as has already been shewn;
—from this date up to the 7th December 1836 the Instrumental error in Azimuth was NORTH 7",87 WEST.

On the 8th December the Instrument was adjusted to a permanent mark, which I had caused to be erected nearly in the direction of the meridian, upon the old Northern Pier; hence;—

from the 8th December 1836 to 17th January 1837 the Instrumental error in Azimuth was

In the intervals just alluded to, the coincidence of the centre wire with the mark was examined every day at Sun rise and Sun set, and on two occasions—On January 6th, and 8th, a small correction of the bisection was made for a deviation to the East of the meridian.

Since the 18th January 1837, the coincidence of the centre wire with the mark has been examined every day at Sun rise and Sun set, and adjustment made when necessary; hence, if C represent the error of Collimation, the Azimuth error A=C+ 2",64; thus—

1837	C "	A "	·
Jan. 18 to Feb. 10	-10,78	- 8,14	I increased the Collimation, and consequently the Azimuthal error.
Feb. 10—April 26	14,37	Ì	In this interval no adjustment to the mark was found necessary.
April 27—May 15	12,39	1	On the 27th April, an adjustment was made for a deviation of about 2" to the East of the N. Meridian.
May 16—June 14	11,24	8,60	In this interval no adjustment to the mark was found necessary.
June 15—July 14	11,53	Í	On the 25th June, at Sun set, adjustment was made for a deviation of about 1" to the West of the N.
July 15—Aug. 31	11,58	8,94	Observed by my head assistant Ragavachariar—No adjustment to the meridian was necessary during this period.
Sept. 1—Sept. 12	15,06	12,42	Observed by Ragavachariar (see p. 16) but an adjustment necessary—It happens fortunately, that during this doubt- ful period, it was cloudy weather.
Sept. 13—Nov. 5	12,44	9,80	Up to October, 15th, the observations were made by Ragavackariar—to whom I had entrusted them during my absence, with orders not to attempt an adjustment, but to make an estimate of the errors if any:—his remarks are as follows— "September 21st morning being Astronomical day—The centre wire does not bisect the mark," appended to this is a drawing of the appearance of the mark and wire, from which I estimate that a deviation of 1 to the East

			then existed; but on the evening of the same day he remarks— "22nd We can not find that difference but it was seen right as before."
Nov. 6-Dec. 31	10,59	7,95	An adjustment was made on the 13th for a deviation of about 1" to the West.

### REDUCTIONS EMPLOYED.

The places of the known stars have been corrected for Aberration, Nutation, and Precession, from the values of a, b, c, d, &c. given in the Royal Astronomical Society's Catalogue, in conjunction with those of A, B, C, D, furnished in the Nautical Almanac; save that a correction has been made when necessary to adapt these latter values to the instant of the Star's Transit.

The table of Refractions employed, is that constructed by Mr. Henry Atkinson, and printed in the 2d Volume of the Astronomical Society's Memoirs, using the "in door" thermometer:—The remaining corrections for the Sun or Planets, have been derived either from the Nautical Almanac, or from Mr. Baily's Astronomical Tables.

In the reduction of the Moon's Place, the ratio of the Polar and Equatoreal Axes of the Earth has been taken at 299: 300

from which we get the angle of the vertical = 5' 0"

Radius of the Earth = ,999825

### ERROR AND RATE OF THE TRANSIT CLOCK.

The error of the Transit Clock has been determined with reference to the Madras Results given in Vol. II.; selecting those stars only which have been frequently observed—which are situated near to the Equinoctial, and which differ less than one tenth of a second from the Greenwich Catalogue.\*

In general it has been my custom to divide the hours of observing into "watches" of three hours each, and to observe during each watch--three of these

<sup>\*</sup> The Greenwich Catalogue here alluded to, refers to that of 720 Stars for 1830, published in 1829 or 1830—there have (I believe) been later catalogues issued from the Greenwich Royal Observatory, but I have not been so fortunate as to obtain a copy.

stars for the determination of the Clock Error;—by this arrangement, any irregularity in the going of the Clock is rendered of little consequence, since the rate is trusted only for one and a half or two hours at most; with regard to the Sun, and the Planets Mercury and Venus,—it frequently happens from clouds or haze, that no star has been observed within 6 or 8 hours of their passage; in this case—when the rate has appeared irregular, I have cancelled the observation. In the comparison of the errors of the Clock on one night, with those of another, for the rate, as well as in their employment for the determination of the places of the unknown Stars, it has always been my custom to compare the results of each observer with his own observations only; by which means, the direct influence of personal equation is avoided; from a recent examination however, I am happy to find that this perplexing and unaccountable source of error, reaches to a very trifling amount in the observations composing the present volume.

In a former volume I mentioned having endeavored to exclude insects from the works of the clock, by making the case as nearly as practicable, air tight; in this particular however I have since been compelled to relax a little, in consequence of the extremely faint beat of the clock—being lost by the unavoidable noise of the observer at the circle, or by the least noise of natives or conveyances passing in the road; the result has been, that on two occasions during the last two years, I have been able satisfactorily to account for the ill going of the clock, by finding a spider's line attached to the pendulum; at other times—other causes apparently have operated; thus, on the 27th January 1836 the clock was cleaned, when from some cause not apparent, it continued to lose on its rate until the 8th March, when it was regulated; after this it continued to lose further upon its rate until the 1st May, when the thick state of the oil upon the escapement was the only apparent circumstance to account for the previous ill going; the oil I had applied was ordinary salad oil, but the temperature of from 95 to 105 Fahrenheit (which is usual for several hours during the day at this time of the year) fully accounts for its having become thick.

1836.	Daily Rate.	Remarks.	183	6.	Daily Rate.	Remarks.
Jan. 3 4 6 7 8 9 10 11 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 12 22 23 24	** 1,01	On cleaning the Clock I found a spider's line attached to the pendulum.  Wound up the Clock.	Mar.	25 26 27 28 29 1 2 3 5 6 7 8 9 10 11 11 11 11 11 11 11 11 11 11 11 11	**	I regulated the Clock.

1836.	Daily Rate.	Remarks.	1836.	Daily Rate.	Remarks.
1836.  April 18 19 20 21 22 23 24 25 26 27 28 29 30 11 15 16 18 19 20 21 22 23 24 25 26 28 29 30 31 June 1 15 16 17 8 9 10 11 12 13 14 15 17		Remarks.  Oil thick—cleaned and regulated the clock.  Wound up the clock, pat it back 3 minutes and regulated it.	June 19 20 28 30 July 3 4 9 10 14 15 16 17 18 19 22 26 27 28 30 Aug. 2 4 9		Regulated the Clock.  Continued cloudy weather.  I regulated the clock.

1836.	Daily Rate.	Remarks.	1836.	Daily Rate.	Remarks.
Oct. 2 3 6 7 8	3,88 2,53 1,70 1,62		Dec. 19 20 21 23	3,43 3,60 3,66 3,28	
9 10 11 12 13 14	1,69 2,16 2,61 3,16 3,33		26 31 1837. Jan. 1 3 4	2,96 1,72 1,59 1,42	Put clock backward
16 17 18 19 20 21	3,10 2,97 0,61 1,33 1,52		6 7 8 9 10 11	1,22 0,87 1,37 1,59 1,17 1,17	three minutes.
22 23 25 26 27 28 Nov. 7	1,70 2,24 2,65 2,80	Mostly cloudy weather. It	13 15 19 20 21	1,46 1,10 3,44 2,00 2,19	Wound up the clock.
8 9 10 11 12 13	3,53 4,28 4,20 1,26 1,78 3,00	31st.	23 24 25 26 27 28	1,30 0,94 0,90 1,35 1,30 0,62	
18 22 23 24 25 26	1,06 1,00 0,92 0,52 0,38		29 30 31 Feb. 2 3	0,38 1,20 -0,31 +0,38 -0,19	
27 28 29 Dec. 1 2	0,78 3,00 2,65 4,38 3,99		5 6 7 8 9 10	-0,07 0,09 1,73 0,45 0,57	
5 6 10 11	5,13 2,85 0,58 0,70	Wound up the clock and applied oil to the pallets.	14 15 16	$\begin{array}{c c} 0,88 \\ -0,28 \\ +0,26 \\ 0,28 \\ 0,24 \end{array}$	
17 18		Wound up the clock.	17 18		

183	37.	Daily Rate.	Remarks.	1837.		Daily Rate.	Remarks.
Feb.	19 20 21	s. +0,19 1,38 +0,22	Continued cloudy weather.	April	18 19 20		
Mar.	26 27 28 1	-3,00 3,49 3,74 4,78 5,00	,		21 22 23 24 25	1,51 2,00 1,97 2,35 2,20	·
	4 5 6 7	5,00 4,18 4,41 4,73			26 27 28 29	2,31 2,25 2,36 3,00	
	8 9 10 11 12	3,81 3,96 3,32 4,42 4,90		May	30 1 2 3 4	1,68 2,76 2,45 1,91 1,69	
	13 14 15 16	5,35 4,77 4,69 4,37			5 9 10 11	2,16 2,36 2,41 2,90	
	17 18 19 20 21	3,95 3,35 4,20 4,46 3,53			12 15 16 17 18	2,47 2,75 2,68 2,60 2,20	
	22 23 24 25	3,12 4,77 5,62 5,16		June	24 28 30 31	3,04 3,07 3,98 3,37	
	26 27 28 29 30	4,71 3,63 4,51 6,44 5,94		June	6 7 8 9 10	2,49 1,98 2,18 2,80 2,40	
April	31 1 2 3	6,7 <i>5</i> 7,30	I examined the clock and re- moved a fine thread which	<b>[</b>	11 13 14 16	2,82 3,28 3,15 3,44	Mostly cloudy weather, pe-
	4 5 7 8	0,60 0,85 1,73	had been attached to the pendulum by some mis- chievous spider.	July	20 26 29 30	2,95 3,45 3,80 3,20 2,65	culiar to the S.W. Mon- soon.
	11 12 13 14	+0,26 +0,67 +0,26 -2,79			9 10 11	2,50 2,46 2,97 2,73	
	15 16 17	2,22 1,25 1,50			13 14 15	3,55	

18:	1837.		Remarks.	183	17.	Daily Rate.	Remarks.
July	16 19 20	8. -4,41 4,59 4,65	Continued cloudy weather.	Oct	12 13 14	8. -1,04 0,86 0,56	
Aug.	2 8 9 10 11	1,50 1,56 1,63 1,16 1,54			15 16 17 23 24		The seconds hand tript in winding.
	12 13 20 21	1,50 1,65 2,31	Continued cloudy weather.	Nov.	25 6 7 8	1,60 1,60 1,41 1,51	Continued cloudy weather.
	22 23 27 28	1,33 0,58 2,34 1,43			12 17 21 24	1,03 1,71 3,40	The seconds hand went backwards in winding.
Sep.	29 30 14 15	0,65 0,44 2,75 2,60			26 27 28 29	3,85 2,90 2,27 2,56	
	16 17 18 19	2,09 1,77 1,40 1,78		Dec.	15 16 17 18	2,09 2,39 2,20 2,54	
	20 21 22 23	1,76 1,78 1,71 1,88			19 20 21 24	2,79 2,57 2,30 4,08	
	24 25 26 27 28	1,38 1,87 1,01 1,51			25 26 27 28	2,85 2,57 2,91 2,55	
Oct.	10	0,96 1,22			29	3,19	

#### METEOROLOGICAL INSTRUMENTS EMPLOYED.

The Barometer employed at the commencement of 1836 and up to the end of October of that year, was a Standard (No. 6.) by Gilbert, which, as has been explained in Vol. III., I had been allowed to select from several, which were supplied to the Surveyor General's Department at Calcutta; the diameter of the tube was 0,22 inches, and the zero correction—0,006 inches; rendering necessary to the registered observations, the correction for temperature +0,051—0,006; or, where in the table of refractions allowance is made for

the temperature of the quicksilver,—the correction +,045 is simply necessary.— The thermometers employed during this period were, a Standard by Troughton (which when in England I had carefully compared with the Royal Society's Standard), and one by Jones, which agreed to identity with it; the former being employed outside, and the other inside the building. During the Storm on the 31st October, neither of these Iustruments escaped destruction, so that I had now no remedy left, but that of filling a tube;—accordingly I availed myself of two unbroken glass tubes and cisterns, and the brass scales of the barometers hitherto employed, and set to work as follows; the quicksilver was purified by repeated washings in diluted nitric acid, and was then heated to a temperature little short of boiling water to drive off moisture: the tube was now heated—the hot mercury gradually poured in, and a small air bubble sent up in the usual way to collect stray bubbles:—after filling two tubes in this way with as much care as it was possible to bestow, finding that a difference of less than one hundredth of an inch existed between them, I concluded, that with the exception of finding the specific gravity of the mercury; all that was necessary to ensure a good barometer and accurate results, had been done; accordingly on the 11th December 1836 I commenced to employ one of these barometers, making an allowance of +0,051 for capilliary action (corresponding to a bore of 0,22 inches). In the interim between 1st November and this date, a barometer by Tagliabue was employed, whose correction then appeared to be 0,002 inches subtractive.

The Storm had passed away, and its effects had been forgotten in the busy mornings and evenings of the fine months of January and February, and, with the exception of an occasional glance at the two barometers and a feeling of pleasure at their coincidence—no further thought of them was given until the 10th of May: On this day to oblige a friend I had undertaken, after purifying the mercury in his barometer,—to boil it in the tube; (a precaution I had feared to undertake with my own, having no spare tubes): On comparing the barometer thus constructed with the two "Standards"; to my utter astonishment, a correction 0,125 inches additive to both of mine, appeared necessary;—at first I felt convinced that the error lay with the newly constructed barometer, but after boiling the mercury in the tubes of the two hither-to supposed Standards, they both exhibited increased readings to the above amount—Since this time I have frequently filled barometer tubes, and have found a coincidence between them and the now considered "Standards" which leaves me confident of not being above 0,01 inches in error. To ascertain at

what date this correction ought to commence, or if its progress had been gradual, I compared the meteorological observations of November 1836 with those of former years\* when it was at once evident that the correction was due to all observations since the storm. Hence, in the observations of November 1836, and up to 10th May 1837 the correction +,125 is necessary for zero error, and +,051 for capilliary action, and for subsequent observations, the latter correction only should be employed.

The Thermometers employed since the Storm, are two by Bate, of an ordinary description, which at my request had been sent out to this country for rough purposes by the Honorable Court of Directors: I took the precaution on receiving them (which was a few days before the Storm) to note their difference (at 75°) from the Standard hitherto in use, when neither of them differed more than two tenths of a degree: with this testimony of their accuracy, there need be no fear of their errors at any point in the scale being of importance.

#### OF THE MURAL CIRCLE.



This Instrument having been minutely described in Vol. I., it is only necessary here to state, that the focal length of the telescope is 49 inches, with a clear apperture of 3\frac{2}{3} inches; and that the diameter of the circle is four feet:— The divisions are beautifully cut on a slip of gold (let in upon the circumference of the wheel) to every 5 minutes, and the sub-division of these is effected by four Microscopes situated at 90° apart, viz. two horizontally and two vertically: the readings of each microscope are registered to a tenth of a second, but the error of making a single bisection at either microscope, arising from false light principally, may in some cases amount to 1",5 but generally, I think that the half of this may be stated to be the probable mean error of reading of each microscope.

<sup>&</sup>lt;sup>a</sup> The regularity of the barometer in inter-tripical climates will permit this mode of procedure, whereas in a high Latitude; one, or even two tenths of an inck might be lost sight of in the varied amount of atmospheric pressure which is experienced.

The eye piece is supplied with five vertical and one horizontal fixed wires, and one horizontal moveable wire;—the power employed for astronomical observations is about 120, and for the observation of the collimation, about 70—The stability of the Instrument is equal to any thing that could be desired, a fact, which is well attested, from the circumstance that during the last 4 years I have not had occasion to adjust it either for level or azimuth—and a late examination of the axis, enables me to speak with confidence of its being now after 7 years use, in as good a condition as when it was first erected.

#### OBSERVATIONS MADE WITH THE MURAL CIRCLE.

منتهانكهم

In the years 1836 and 1837 the Mural Circle has continued to be employed as heretofore—in the measurement of North Polar Distance—taking the mean of the four microscopes at each observation. In the Computation of the Index Error, I have employed the Madras Catalogue published in Vol. II., giving always a preference to those stars which differed the least from the Greenwich Catalogue, and restricting the limit of observations for this purpose to within 20° of the zenith; by this arrangement, the anomaly which has been shewn to exist in the Cambridge Mural Circle (depending probably upon flexure of the horizontal wire)—would here necessarily have but a very trifling effect upon the *Index Error*; to discover its amount when the telescope was directed to the horizon,—in the year 1835 I availed myself of a plan which has already been described in Vol. III., thus—" I directed the Circle Telescope to the North horizon and opposite to it, (in the window sill of the observatory) placed a 46-inch telescope by Dolland, with its object glass presented to that of the circle telescope, and its whole length disposed in a right line with it;—turning the circle through 180° to the South Lorizon, I, in a similar way disposed another telescope (Dolland's 5 feet): into the focus of the 46 telescope I had fitted a pair of cross lines, and the 5 feet telescope was supplied with a double wire micrometer: matters thus arranged, I took out the circle eye piece and slide, and unscrewed the object glass, leaving a clear aperture of two inches through the circle telescope, by which means, with the assistance of the micrometer wire, I was unable to adjust the line of collimation of the 5 feet telescope to parallelism with that of the 46-inch placed in the opposite window; this done, I replaced the eye piece, screwed in the object glass, and immediately measured the angular distance between the telescopes; to guard against movement of the telescopes, the observation was not considered complete, till the object glass of the circle telescope had again been removed, and the parallelism of the two other telescopes again examined; but the telescopes having been very securely fixed, no movement whatever was detected during the time of making the observations (about three hours".)

The result of several measurements in this way shewed that the angular distance between the two marks was,— reckoning from the South horizon in the direction through the Nadir\* = 180° 0' 0",38 exhibiting a negative flexure to the amount 0",19. Whether this remained constant or no during the early part of 1836, I have now no means of ascertaining; but on the 27th August, some rain having leaked through the roof, broken the wires, and wetted the inside of the object glass; I availed myself of the necessity of taking out the object glass, to repeat the above experiment. Having put in a new set of silk lines;—from the mean of 5 separate measurements; the angle between the South Telescope through the Nadir up to the North Telescope. was 179° 59′ 58″,88: exhibiting a positive flexure of 0″,56 when directed to the horizon:—Since this period no further observation to this end have been made, which has arisen from a desire of not interrupting the observations. and from a fear of accident in taking out the object glass;—enough however has been done, to shew, that the reduction of the observations by using a common Index Error, entails a very trifling amount of error upon the Madras Results. In addition to the Index Error computed from the observed places of known stars, the observations with the Reflecting Collimator have continued to be made three or four times every day; viz. at 0, 6, 12 and 18 hours; by this means a severe check has always been kept upon the Index Error by the stars, and a very accurate knowledge of the difference between the one method and the other determined, of which I have now some idea of availing myself, by giving up the observation of known stars altogether.

<sup>\*</sup> Erroneously stated per zen in Vol. III.

Da		No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob-	Index Error by Reflecting Collimator.	Difference.
183			′ ″			' "	i
Jan.	1	6	-2 11,26		_		1
1	2 3	7	•		5	<b>—2</b> 9,51	
1	4	2	10,13 9,22		5	9,77	0,36
1	5	~	3,22	I took out the axis-cleaned		10,42 9,58	+1,20
1	6 7	3 10	17.00	it, and applied fresh oil.	2	17,09	,
1	7	)	17,26	••	2	16,91	<b>{-0,</b> 26
1	8	6	14,31		5	16,83	+2,52
ļ	9 10	8 9	12,89		5	15,39	
	11	!}		•	3 3	12,58	0,31
1	12	6	12,48	Mean = 2' 12'',78	ا "	11,96	-0,52
i	13	8	12,83	i i	4	11,85	_0,98
ł	14	7	12,91	J	4	12,69	-0,22
!	15	9	11,56		4	11,60	}+0,13
1	16	!}	31,00		4	11,78	\\ \( \tau_{0,10} \)
1	17 18	{ 10	10,55		4	11,60	<b>}</b> + 1,20
ł	19	7	10,01		4	11,90 11,31	+1,30
1	20	7	8,91		3	10,68	+1,77
	21	} 6	9,02	ן	2	8,65	13 ' ' 8
1	22	15	3,02		3	8,85	-0,27
i	23 24	<b>}</b> 10	9,19	24	4	9,05	+0,08
1	24 25	9	9,28	} Mean = 2' 9*,24	3 5	9,50	, ,
1	26	5	9,34	-	4	9,23 9,21	0,05 0,13
	27	8	9,68	j	4	9,68	0,00
i	28	7	10,11	ก้ l	4	9,91	-0,20
1	29	7	10,16	i i	3	10,20	+0,04
1	30 31	7 5	9,88	1	3	10,56	+0,68
Feb.	1	ıĭ	10,17 9,54		5 3	9,93 10,75	-0,24 +1,21
1-00.	2	8	10,29	1	4	9,46	-0,83
ŀ	3	7	9,97	Mean == 2' 10",01	4	10,62	+0,65
	4	6	9,91	,	4	8,03	-1,88
1	5	7	9,98		4	9,09	-0,89
<b>\$</b>	6 7	<b>4</b> 9	10,42		2	10,45	+0,03
i	8	5	9,85 10,24		4	10,45	+0,60 -0,84
	9	5	9,59	`	5	9,40 9,01	-0,54 -0,58
i	10	7	9,28	ις i	4	9,00	0,28
1	11	4	8, <i>5</i> 4	1	4	8,32	-0,22
ı	12	5	8,59	Mean = 2' 8",55	5	8,79	+0,20
]	13 14	5 6	7,98	(	5	8,11	+0,13
1	15	5	8,54 8,39	)	5 4	7,50	-1,04 -0.27
Ì	16	8	5,36	15	4	8,12 4,40	-0,27 -0,96
1	17	5	<i>5</i> ,66	<b> /</b>	4	4,81	-0,85
1	18	7	6,07	$Mean = 2' 5^{\bullet},75$	5	4,38	-1,69
f	19	9	5,95	<b>`</b>	4	<i>5</i> ,60	0,35
1 .	20	(		J	3.	6,60	}
1		1	l		1	<u> </u>	' '

Date	e.	No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob- servations.	Index Error by Reflecting Collimator.	Difference.
1836	3.		/ /			/ *	
Feb.	21	6	-2 6,43		5	<b>2</b> 6,00	-0,43
	22	6	6,97		5	5,87	-1,10
	23	} 7	7,62		4	5,98	-1,69
	24 25	6	7,78		5	5,89 <b>5,</b> 06	-2,72
	26	7	6,95		5	<i>5</i> ,96	-2,72 -0,99
	27	ģ	6,29		5	6,27	0,02
	28				5	5,47	,,,,
	<b>2</b> 9	5	6,77		5	5,84	-0,93
March	1	} 7	7,17		5	6,12	<b>}</b> -0,86
	2 3	3	j ,		5	6,50	}
	4	8 5	7,59		4	5,38 6,22	<b>{</b> —1,79
	5	5	6,62		4	6,66	+0,04
	6	5	7,33		5	5,56	-1,77
1	7	} 5	7,12		3	5,12	} -2,02
	8	13 "	7,12		4	5.08	5-2,02
	9	8 9	7,11		2	4,65	2,17
	10 11	6	7,88		5 3	5,23 4,24	-3,64
	12	6	6,89		5	5,00	-3,04 $-1,89$
	13	)	1		4	5,10	)
	14	9	7,06		4	5,05	<b>}</b> —1,99
	15	9	6,72		4	5,50	}-0,96
	16	,	I .		4	6,02	
	17 18	7	6,96		4 3	4,72 4,73	-2,24 -1,95
	19	6	6,68 7,02		4	5,04	<b>—1,93</b>
	20	6	6,71		5	4,75	-1,96
	21	6	6,73		4	4,76	-1,97
				Mean == 2' 7",04	li		
	22	5	5,97	. ,	5	4,51	1,46
	23	5	6,27		3	4,32	-1,95
	24 25	6	5,73		3	3,3 <b>7</b> 4,66	1,07
	26	6	6,16		5	4,82	-1,07 -1,34
	27	6	6,00		3	4,33	-1,67
	28	5	6,98		4	5,03	-1.95
	29	5	5,58		2	3,92	-1,66
	30	5	6,24		5 2	5,71	-0,53
April	31 1	7	6,50 6,19		4	5,08 5,54	-1,42
	2	6	5,71		5	6,39	0,65 +0,68
	3	7	6,65		3	6,74	+0,09
	4	l	i		4	5,71	
	5	, 7	5,62		5	5,94	+0,32
	6	6	6,35		4	4,72	-2,05
	8	, ,	4		2	3 89	,
	9	5	6,44		4	4,7 l 3.85	-1,73
	10	6	6,02		4	3,77	-2,25

Date.	No. of ob-	Index Error by Stars.	Remarks.	No. of ob- servations.	Index Error by Reflecting Collimator.	Difference.
1836. April I 1	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix} \begin{bmatrix} 10 \\ 5 \end{bmatrix}$	-2 6,04 5,18		4 4 3	_2 4,44 4,02 3,83	} —1,81 —1,35
1 1	4 7 5 5 7 8 8 8 9 8	1,69 1,82 1,76 1,85	Mean = 2' 6",09	5 5 4 5 4 5 3	2,16 0,72 0,23 1,79 1 59 36 1 59,86 2 0,50	$ \begin{array}{c} +0.47 \\ -1.10 \\ -1.53 \\ -0.06 \end{array} $ $ \begin{array}{c} -2.85 \end{array} $
2 2 2 2 2 2	1 2 6 4 5 5 6 5 5	2,13 1,51 1,89		2 4 5 5 3 4	2 2,09 0,33 0,12 0,50 0,37 1 59.90	$ \begin{array}{c} -2.01 \\ -1.01 \\ -1.76 \end{array} $
2 2 2 3 May	8  🐧 🖰	1,39 0,58 1,50		3 4 5 5 4 3	1 59,55 2 0,17 0,34 0,40 0,21 1 59,73	$\begin{cases} -1,53 \\ -0,21 \end{cases}$
Ì	3 4 5 6 7 8 9 9 0 1	0,88	Mean = 2' 1",72	3 4 4 3 4 5 5	2 0,22 2 0,44 1 58,87 1 58,91 1 59,60 2 0,38 0,42 1,60	}1,45 }1,64
1 1 1 1 1	2 3 4 5 6 7 8	2,21 1,06		53324344	0,12 0,02 0,27 0,96 1,28 2 0,20 1 59,97 2 0,25	\ \ \ -1,73 \ \ \ \ -0,83 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
1 2 2 2 2 2	9 0 1 2 3 4 5 6	1,75 1,86	·	5 4 2 4 3 4	2 0,21 2 0,08 1 59,68 2 0,53 0,13 0,36 0,37	\{ -1,87 \} \-1,52 \
$\frac{2}{2}$	6 7 8 9	0,90		3 2 3 3	1,14 0.15 0,16 0,21	-0,49

Date.	No. of ob-	Index Error by Stars.	4	No. of ob- servations.	Index Error by Reflecting Collimator.	Difference.
1836. May	30	, "		2 3	_2 1,13	)
June	6	<b>-2</b> 0,80		2 3	1 58.18 1 58,98 1 57,71	-1,49
	41)			3	1 59,56 2 0,30 0,16	
	5 6 7 8 6	0,25		3 2	0,03 1 59,99	-0,16
	9 6 10 6	2 0,20 1 59,72 2 0,74		4 3 2	2 0,16 1 59,94 2 1,18	$ \begin{array}{c c} -0.04 \\ +0.22 \\ +0.44 \end{array} $
	11 6 12 7 13 7	2 0,15 1 59,25 1 58,52		2 3 3 3	1 59,13 58,72 58,63	$ \begin{array}{r} -1.02 \\ -0.53 \\ +0.11 \end{array} $
	14 } 8 15 } 8	59,24		3	58,17 56,30	3-2,01
	16 } 9 17 } 9	59,19		3 4 3	57,64 57,28 57,87	
1 :	18 <b>}</b> 7	59,20		4 4 3	58,65 57,49 57,07	}-0,9 <del>4</del>
	22     23			3 2	57,44 58,81	
	24 > 8 25   26	1 58,94		2 3 3	58,36 58,07 58,12	
)	27 28 29			3 3	58,23 57,76 58,18	ļ
July		59,70		4 4	58,87 59,43	-0,61
	2 3 4			$\frac{3}{2}$	59,89	h
	5 6 7 8	58,82		2 1 2	59,50 59,30 59,74	   }+0,82
	8  }			2 2 3	59,86 59,04	ļ
	10 11 12 13	59,58		3	59,26 60,29 59,90	) }+0,12
-	14 )			3 4 5	59,13 59,93 60,19	
	15 16 17 6	59,25 1 59,33		3	58,64 57,87	+0,17 -1,46
	18 7 19 6	2 0,01 1 59,64		2	58,79 59,51	-1,22 -0,13

Date		No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob- servations	Index Error by Reflecting Collimator.	Difference.
Aug.	20 21 22 23 24 25 26 27 28 30 31 1 2 3 4 5 6 7 8 9 10 11 11 11 11 11 11 11 11 11 11 11 11	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	-2 0,30 1 58,84 58,36	Continued cloudy weather peculiar to the S. W. Monsoon.	4223224241332323213333 2223313222242	-1 60,61 60,64 60,23 58,67 59,82 59,27 60,78 59,06 59,15 59,90 59,11 59,26 60,09 59,39 59,89 59,95 59,72 59,47 59,79 60,08 59,45 59,39 59,39 59,45 59,39 58,70 58,61 56,89 57,33 58,61 56,89 57,33 58,35 57,39 56,87 57,19 56,92	\\ \-0,55\\ \+0,51\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Sep.	25 26 27 8 9 10 11 12 13	5 5 7 6 5	—0 45,15 46,23 45,98 44,91 46,16 47,26	A few drops of rain had leaked through the roof and broken the wires;—I put in a new set.	2 3 1 3 4 5 4 4 4	57,13 57,75 57,75 57,75 -0 46,90 47,38 45,73 44,15 46,81 46,81 46,95	+1,99 -0,50 -1,83 -0,30 +0,65 -1,31

Da	te.	No. of ob-	ratio	Index Error by Stars.	Remarks.	No. of ob-	Index Error by Reflecting Collimator.	Difference.
183	36.			/ 4			1 11	i
Sep.	15		5	<b>0 46,11</b>		3	-0 47,49	+1,38
1 -	16		5	<b>4</b> 5,20		4	46,65	+1,45
1	17	ł				3	45,66	1
ļ	18	1	_			4	46,79	
1	19		5	46,51		3	47,18	+0,67
1	20	}	4	45,85		3	44,62 45,13	6-0,97
l	$\begin{array}{c} 21 \\ 22 \end{array}$	J	5	46,12		3	46,32	+0,20
l	23		5	46,27		5	46,15	
1	24	1	١	40,27		3	46,53	-0,12
1	25	1	_	4 7 7 7		3	46,61	7
1	26	:}	7	45,53	•	3	46,95	+1,25
i	27	1				3	45,23	l i
1	28	l				4	46,48	
1	29	15	6	47,64		3	46,84	-0,74
1_	30	נו				5	46,96	1) 1
Oct.	1		5	47,07		5	48,00	+0,93
ļ	2		5 5	47,64		4	47,27	-0,37
ĺ	3	l	9	46,22		3	46,09 47,15	-0,13
	<b>4</b> 5	l				3	45,71	i i
•	6	1	5	46,68		4	46,90	+0,22
1	7		6	46,49		4	46,92	+0.43
l	8		6	45,98		5	46,85	+0,87
1	9		6	45.83		4	46,63	+0,80
ł	10		6	45,72		5	47,16	+1,44
	11	i	5	45,94		4	47,32	+1,38
	12	1	6	45,96		4	45,74	_0,22
	13		6	45,41		5	46,42	+1,01
ł	14	!	5	46,07		5	45,06	-1,01
1	15	l	5	47,27		4 3	46,42	-0,85
l	16 17	1	5 6	47,81		4	45,93 45,50	—1,88 —1,85
ĺ	18	l	6	47,35 47,25		4	45,65	-1,60
İ	19	1	5	46,86		4	44,88	-1,00 -1,98
l	20	1	4	47,19	·	2	45,92	_1,27
	21		5	46,30		4	46.23	-0,07
!	22	i	6	46,47	•	5	45,32	-1,15
l	23	1		·		3	45,62	)
1	24		5	46,15		3	45,40	<b>}</b> —1,00
i	25	}				4	44,44	)
l	26	١.		ļ		2	44,01	, 1
l	27	}	5	45,81		4	43,72	<b>{1,48</b>
i	28 29	)		Í		4 2	44,94	)
1	30	ļ	ı		The violence of the wind,	2	43,97	
1	31		i		prevented observation.			
Nov.	ì	1	5	44,76	- 1	3	42,74	-2,02
1		į,				2	43,83	
i i	2 3	13	5	44,36		2	43.86	5-0,51
1	4	1	4	43,02		3	44,05	+1,03
	-			.		<u> </u>		

Date.	No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob-	Index Error by Reflecting Collimator.	Difference.
1836. Nov. 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 23 24 25 26 27 28 29 30 Dec. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25	5 6 6 6 5 7 7 5 6	43,46 44,58 44,70 43,25 44,64 43,96 43,86 43,86 44,21  43,67  40,38 41,85 42,56 43,35 42,41  41,71 42,00 41,68 41,65 43,84 43,47  42,04  42,35 42,48  42,55  43,56 43,21 42,95 42,24 42,55		34534554422344444235552532235543332522443442	-0 43,52 44,03 43,99 42,98 42,73 43,89 44,27 44,56 43,83 42,10 43,61 43,57 44,08 45,28 39,49 39,76 41,70 42,40 42,46 40,90 41,57 41,82 40,72 41,53 39,55 39,96 39,92 40,32 41,27 40,93 41,41 41,96 42,38 42,38 42,77 42,07 41,46 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,66 43,20 42,38 42,77 42,50 42,72 43,21	+0,06 -0,55 +0,71 -0,27 -1,91 -0,07 +0,41 +0,35  -0,10  -0,89 -1,12 -0,16 -0,89 -1,51  -0,99 -0,47 -2,13 -1,69 -3,92 -3,15  -0,65 +0,03 -0,50  -1,23 -0,50  -1,23 -0,20 -1,23 -0,20 -1,23 -0,20 -1,23 -0,20 -1,23 -0,20 -1,23 -0,20

Date.	No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob- servations.	Index Error by Reflecting Collimator.	Difference.
1836.		1 4		1 7	1	
Dec. 26 27 28 29 30 31 1837.	9	_0 <b>42,87</b>		5 2 3 3 .2 5	-0 42,72 42,37 41,91 42,94 42,80 41,93	-0,43
_				li	42,15	İ
2	5	42,80		5	42,20	<b>—0,6</b> 0
Jan. 1 2 3 4	} 8	44,01		4	42,55	}_1,61
		1		5	42,25	,
5 6 7	5	44,22	•	5	42,28	1,94
7	5 5	44,00 44,28		4 5.	43,27 43,81	
8	6	43,89		5	43,47	-0,47 -0,42
8	8	44,44		5	42,97	-1,47
10	6	43,26		3	42,49	-0,77
11	6	42,80		5	42,77	-0,03
12	7	43,46		4	41,75	
13	r	}		2	42,95	
14 15	8 4	43,36	·	2 2	41,88	
16	1	}		3	41,65 40,57	1
17	6	44,07		3	40.37	_3,70
18	5	43,57		4	41,37	-2,20
19		43,62		4	40,37	-3,25
20		43,51		5	41,06	-2,45
21		43,93		2	41,49	-2,44
22 23		44,07 44,02		3 3	41,14	
23 24	7	43,79		3	41,07 42,72	$\begin{vmatrix} -2.95 \\ -1.07 \end{vmatrix}$
25		42,75	•	4	42,26	-0.49
26	7	43,81		3	42,59	-1,22
27	7	43,93		3	43,22	-071
28		43,58		4	42,96	
29 30	.! .	44,39		3	43,02	1.
31	}}8	43,96		2	43,14 42,91	-0,93
Feb.	7	43,75		2	44,39	+0,64
2	3	1 2,10		4	43,61	
3	6	43,63		3	44,27	+0.64
4	7 8	43,65		2	42,30	-1,35
5	8	43,41		3	42,66	-0,75
3 4 5 6 7 8	11	43,63 43.82		3 4	43.41 41,71	
, ,	j 8	44,06		3	41,72	-2,11 -2,34
	5 8 7 6	44,36		3	42,25	-2,01
10	6	43,65		3	41,78	-1,87
11	6	44,22		4	42.09	-2,13
12	6	43,18		5	41,92	-1,26
13	6	43,33		5	42,81	-0,52

46 INDEX ERROR OF THE MURAL CIRCLE FOR 1836 AND 1837.

Date.	No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob-	Index Error by Reflecting Collimator.	Difference.
1837.   April 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30   May 1   12   12   13   14   15   16   17   18   19   20   21   22   23   24   25   26   27   28   29   30   May 1   10   11   12   12   12   12   12	6 5 8 10 9   6666658 9 6 8 10 7 8 6 8	by	Remarks.  Mean 37*,36  Mean 38*,47	No	Reflecting Collimator.	-0,07 +0,07 -0,13 +0,69 +0,25 +1,45 +0,63 +0,69 -0,07 -1,53 -0,38 +0,05 +1,00 -1,48 -0,81 -2,29 -0,89 -0,50 -0,18 +0,53
13 14 15 16 17 18 19 20	8	37,98 38,39		3 3 4 4 4 4 4 4	37,67 37,13 38,10 37,65 37,33 37,65 37,49 36,87 37,81 38,23	}0,11 }0,90
22 23 24	} 8	37,03		4 4 2	37,78 38.12 38,28	}+1,17

Da	te.	No. of ob.	servations.	1	Error	Remarks.	No. of ob- servations.	Index Error by Reflecting Collimator.	Difference.
183 <b>May</b>	25 26 27 28 29	}	8	-0	37,70	Mean — 37*,63	2 2 2 2	-0 38,14 37,82 37,65 37,95 38,02	+0,17
June	30 31 1 2 3	,	7		36,69	ŕ	3 3 2 2 2 2 2	38,73 38,34 38,28 38,26 37,07 37,72	}+1,84
	5 6 7 8 9 10 11	·	6 5 5 5 5 8		36,66 36,85 36,07 35,75 35,90 37,37 36,53		2 3 3 3 2 3	37,49 37,10 37,46 37,46 37,69 37,37 37,66	+0,83 +0,25 +1,39 +1,71 +1,79 0,00 +1,13
	12 13 14 15 16		4 5 8		36,92 36,16 36,58	Mean — 36*,49	3 2 3 2	37,67 38,01 37,36 37,02 36,86	+0,75 $+1,20$ $+0,36$
	17 18 19 20 21 22	,	6		35,96		2 2 2 2 3	37,10 37,43 37,36 36,12 35,65	}+0,03
	23 24 25 26 27		4 6 7 6		36,31 34,95 36,68 36,95		3 3 3 3 3 3	36,33 36,24 36,01 36,44 35,30 35,82	-0,07 +1,06 -0,24 -1,65
July	28 29 30 1 2 3	)	7		36,60 35,74		2 2 2 3 2 4	36,62 36,71 36,78 36,82 36,65 37,03	+1,29
	4 5 6 7 8 9		7 7		35,33 36,14		2 2 3 2 3 3	37,20 37,13 35,88 35,61 35,38 35,30	+0,05 0,84
	10 11				35,52	Mean — 36°,12	<b>4</b> 5	35,47 36,41	+0,89

48 INDEX ERROR OF THE MURAL CIRCLE FOR 1836 AND 1837.

Date.	No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob- servations.	Index Error by Reflecting Collimator,	Difference.
1837.	ı	/ "		1	, ,,	
July	12 13 5	_0 35,95		4	—0 35,78 35,45	-0,50
	14 )	i I		3	35,57	
	15 5	36,18		4	36,49	-0.15
	16 5 17	36,12		3	36 <b>,08</b>	0,04
	17 <sub> </sub> 18	1		2	36,15 35,76	
	19	i		2 3 3	36,34	
! !	20			3	36,35	
	21 22	26.12		2 2 3	36,12 36,55	+0,42
	22 <sub> </sub> 23	36,13		3	36,38	T 0,42
	24	1		2	36,32	
	25			2 3 3 3 2	35,99	
i	26 27			3	35,78 36,19	
	28	1 1		2	36,41	
	29			2	35,80	1
	30	1		2	36,10	ı
	31	i		2	36,63 35,6 <b>6</b>	
Aug.				2	36,33	
İ	2 3	27.11	i	2 2 2 2 2 2 2	36,62	<del>-1,06</del>
}	4	37,11		2	35,66	(-1,00
ĺ	5			2	35,9 <b>5</b> 36,10	<b>)</b>
1	7			2 3	36,22	أنبه أ
	4 5 6 7 8 6	36,56		4	36,09	-0,41
	9 6	37,42		4	35,59	_1,83
	$\begin{bmatrix} 10 \\ 11 \end{bmatrix} $ 9	36,58	1	4 3	35,60 35,3 <b>5</b>	<b>}</b> —1,11
ļ	12 5	37,32	:	4	35,20	-2,12
1	13			, 2	35,00	1
i	14			2	35,41	
1	16			2 2 2 2 2	37,42 37,31	
1	17 > 5	38,09		2	36,6 <b>5</b>	\_1,74 \
l	18			2	36,60	
i	19			2	36,51	
}	20 21 21 22 23 6			2	35,93 36,20	2 000
1	21 6	38,50	1	3	36,75	-2,03
	23	1	!	2	36,27	
	24)	,		2 2 3 2 2 2 3 3	35,70 36,06	) . !
	24 25 26 27 8	36,52		2	36,30	<b>}</b> —0,10
1	27			3	<b>37,</b> 61 i	)
i	28 <b>6</b> 29 6	37,71	]	3	37,10	-0,61
1	29 6	38,04		4	36,46	1,58

Test
4       5       6       7       8         3       35,26       2       34,76       3       34,44       2       34,21

Date.	No. of ob- servations.	Index Error by Stars.	Remarks.	No. of ob- servations.	Index Error by Reflecting Collimator.	Difference.
1837. Dec. 10 11 12 13 14 15 16 17 18! 20 21 22 23 24 25 26 27 28 29 30 31	5 9 7 9	-0 34,98 35,27 35,13 34,55 34,37 33,54 34,97 34,77 35,42 36,17		233332443422413334322	-0 32,76 33,02 33,67 32,53 33,89 32,95 33,17 33,02 32,91 32,91 33,72 32,80 33,74 33,55 33,74 33,55 33,09 33,71 33,61 33,56 34,34 36,64 37,20	

Taking the means of the column "difference", and putting d L. for the error of the Assumed Latitude, and E for the error of the four divisions employed, we get

from 260 Observations in 1835 
$$E + d L = -0$$
,06  $= -0$ ,65  $= -0$ ,55 Mean  $E + d L = -0$ ,70  $= -$ 

The discordance here found between the result for 1835 as compared with that for 1836 and 1837, is, as far as our present knowledge extends, chargeable alone to error of observation: it adds one to a great many other cases of daily occurrence, which shew, that notwithstanding the facility with which an accuracy of one or two seconds may be attained, (even by a single observation) still, how little control continued observation gives us over the fraction of a second.

# RESULT OF OBSERVATIONS MADE WITH THE TRANSIT INSTRUMENT AND MURAL CIRCLE.



It has hitherto been a constant source of regret to me,—that whilst the observations of the fixed Stars and Planets, have come out—in a manner creditable to the Madras Instruments and Observers—still, that the observations of the Sun have been discordant to a degree little calculated to confer credit upon either. It is not that the mean results have differed much at any time, from those determined at other observatories; but the discordance found among individual results reaches to an amount (occasionally 5 or 6 seconds + or —) which could hardly be credited: during the past two years the subject has occupied no small share of my attention, and the result has been I am sorry to say but little satisfactory. During the Autumn of 1835 and in 1836 and 1837, it had generally been my custom, to compute the Sun's N.P.D.—set the instrument, and read off the 4 Microscopes previously to opening the shutters for the meridian observation; the comparison of these readings with those made at the time of meridian passage, shews that no change is ever effected upon the relative position of the miscroscopes by the Sun shining upon the Instrument: to discover if the Index Error remained constant under these circumstances,—I made two or three observations with the Reflecting Collimator at a few minutes before Noon; and then, opening the shutter,—allowed the Sun to shine upon the Instrument for 5 minutes before the meridian passage; immediately after which, the Observation with the Reflecting Collimator was repeated: the result shewed, that no appreciable change had occurred from the action of the Sun's rays upon the Instrument for this time: —under these circumstances I am reluctantly compelled to proceed, and leave this matter still unexplained. In the table which follows, the meridian observations of the Sun at the Transit have it will be observed, on many occasions been omitted, which has arisen in consequence of no known star having been observed during the day time-when the uncertainty of the clock's rate would not permit its error to be interpolated from the evening observations.

The observed transit of the 1st and 2d limb over the five wires, furnishes us with the value of the apparent semidiameter; from which, the mean horizontal semidiameter =  $\left(\frac{\text{Sun's 2}L.-1L}{2}\right) \times 15 \left(1 + \frac{a'-a}{48}\right) \sin \text{N.P.D.} \times \text{dist. (Earth - Sun)}$ 

At the Circle it has been usual to observe either the North limb alternately with the South limb at consecutive transits, or to observe on the same day—the N.P.D. of the one limb at 30 seconds before the meridian passage, and that of the other at 30 seconds after it—whereby the mean vertical semidiameter of the Sun has been computed from the formulæ—

M. V. Semid. =  $\frac{N. P. D. Sun's South L. - N. P. D. Sun's North L. + dr. \pm d D. - C - T.}{2} \times dist.$  (Sun-Barth.) where a', a, represent the A. R. of the Sun at the noon following, and preceding the day of observation; dr, the difference of the refractions due to the N. and S. limbs; d D, the change of Declination in  $1^m$  of time (the interval between the observations), C a correction due to a small inclination of the horizontal wire; which, up to the 19th June 1836 amounted to 1'', 46 but has since been reduced to 0; and  $T = 2^n$ , 42 is the value of the diameter of the wire.

Comparison of the Observed A. R. and N. P. D. of the Sun, with the places interpolated from the Nautical Almanac.

		R	ight	t Ascei	nsion	Error of	Nort	h P	olar D	istance	Error of	Mean Semidiameter.			
183	7.		fro erv	m ation.	from N. A.	Tables.	from observation.			from N. A.	Tubles.	Horizontal.		Vertical.	
	i	h. :	m.	- <del>s.</del>	s.		1 0	,	4	<i>"</i>	+	,	*		
Jan.	2		47	45,02	44,60	0,42	113	0	25,15	28,60	+3,45				
	3		52		9,30	-0,49	112	55	8,28		+4,22	16	2,01		
	4		<b>5</b> 6	34,21	33,70	0,51	l	<b>4</b> 9	28,38	29,00	+0,62		0,27		
	6	19	5	21 47	21,10	0,37	•	36	37,82	40,90			1,96		
	7		9	44,65	44,20	0,45	•	29	32,95		+3,75		1.87		
	, 8		14	7.04	6,90	0.14		22	<b>5</b> .58	5,70	+0,12		3,72		
	9		18		29,00	+0,08	l	14	5,82		+2.58		3,68		
	10		22	50,95	50,60	0,35			43,26	44,80			2,68		
	11		27	12,31	11,80	<b></b> 0,51	•		52,36				59.90		
	13		-	52.80	52.30	-0,50	•		<i>5</i> 8,00		+1,70		59,80		
	14		40	11,93	11.80	-0,13		27	50,49	53.90	+3.41		55,96		
	15		44		30,40		İ	17	21,46		+1,74	16	3,58		
	16		48	48,91	48,60	-0,31	!		28.03	27,90	-0.13		2,32		
	17		53	6,12	5,90	-0,22		55	7,89	8.30	+0,41		59,66		
	18!		57	22.85	22 70				25,71	24,80	-0.91		58,27		
	19		į	39,05	38,70			31	16,97	17,80	+0,83	16	1,18		
	20		.5		53.90		1	_	FF 01	F4 00	1.61		1 67		
	21		10	8,85	8,40		1.00		55,61	54.00			1,67		
	22		14	22,30	22,10	-0.20	109	<b>5</b> 2	37,44	38 40	+0,96		0.47		

183	.	R	ight	Asce	nsion	Error of	Nort	h P	olar D	istance	Error of	Mean Semidiameter.			
100	o.   	ob	fron	n ition.	from N. A.	Tables.	obe	fror	n tion.	from N. A.	Tables.	Horizontal.	Vertical		
T	02	A.		8. 25.26	8.	0.26	109	30	1,40	0,50	-0,90	15 58,70	1		
Jan.	23 24	20	18	35,36 47,23		-0,36 0,13	103	03	1,40	0,50	0,50	16 2,14	ł		
	25			58,56		-0.16		10	34,83	39,30	+4,47	1,10	1		
	26		31	9,09	8,90			- •	0 1,00	00,00	,	0,80			
	27			19,22	18.60		108	40	54,70	53,90	-0,80	1,96	1		
	28			27,64	27,50	-0,14	}		26,81		+3,79	1,82	1		
	29			35,76			1	9	44,31	47,60		0,90	1		
	30			43,14	42,60		107	53	42,30	45,00	+2,70	15 59,93	ļ		
	31			49,04	48,90		ł					16 2,30			
Feb.	1		<b>5</b> 5	54,70	54,30	-0,40	•			'		2,48			
	2			59,35	58,90		107		46,33		-1,53	2,16			
	3	21	4	3,31	2,70	-0,61	106		26,44			1,50			
	4		8	6,38	5,80				54,05			0,30	1		
	5 6		12	8,81	8,00	-0,81	100	11	2,81			1,66	į		
	6			10,27	9,40	-0,87	105		55,22			4,30			
	7			10,04		<b>-0,14</b>	!		33,47			1,20			
	8			10,32	9,70	-0.62	104		54,66 58,82		-2,62	0,68			
	9		28	9,47		-0,77	104	JU	00,02	30,20	-2,02	0,47			
	10 11		32 36	7,77	7,00 4,50	-0,77 $-0,22$		18	15,55	20,00	+4,45	,	1		
	12		40	4,72 1,54	1,20	-0,22 -0,34	103		37,19			15 58,98			
	13			57,52	57,20	-0,32	1		41,35			59,86			
	14			52,40					37,35			16 2,28	1		
	15			47,18			102		14,93			1,15			
	16			41,20		-0,70			42,53		+4,17	0,06	1		
	17			34,09			]	16	58,93	1,80		15 59,75	Į.		
	18	22		26,24	25,70	-0,54	101	56	0,78			16 2,17	!		
	19			17,63	17,30	-0,33	1		55,24			1,10			
	20		11	8,67	8,10	0,57			37,89			0,75			
	21		14	58,47	58,40	-0,07	100	52	5,56	9,00	+ 3,44	3,18			
	22			48,41			İ			1		1,06	1		
	23			36,87		-0,27	_ ا		00 50	40.00	. 2 00	2,90	1		
	24			25,28		-0,48	99		39,58			0,24			
	25			12,42		-0.02	i		34,42	,	+4,31	1,48	1		
	26			59,81	59,30	-0,51	0.0	30	16,49 58,42	57,80	-0.62	1,38	j		
	27			46,16		-0,56	90		25,31		+2,09	1,52	1		
	28			32,06			97	54	48,64	49,70		1,42			
Mar.	29 1		49	17,22 2,15	16,80 1,80		1	32		5,30	+1.90	2,30	1		
niai.	9			46,02	45,90		İ		12,18	14,40	+2,22	1	I		
	2 3			29,69	29,60		96		16,18	17,50	+1,32	1,16	1		
	4	23		13,02	12,80	-0,22			10,62	15,20	+4,58	1,32			
	5			55,67	55,50	-0,17	l	0	5,74	7,40	+1,66	2,48	!		
	5 6			37,60	37,90		95		55,59	54,80	-0,79	3,38	1		
	7			20,16	19,70				40,00	37,70	-2,30	1,12	1		
	8		15	1,91	1,30	0,61	94		15,41	16,30	+0,89	2,78			
	9		18	42,63		0,13	!		52,79	51,00	-1,79	0,62	1		
	10		22	23,56	23,40				21,03		+1,27	0,67			
	11		26	3,86	4,00		93		49,34		+1,06	2,72	!		
	12 13	i		44,36 24,33			١		12,32 38,95	1 <i>5</i> ,80 39,10	+3,48 +0,15	2,12			

100		Ħ	ligh	t Ascer	nsion	Error of North Polar Distance				Error of	Mean Semidiameter.				
183	0.	ob	fro: serv	m ation	from N. A.	Tables.	from observation.		from N. A.	Tables.	Horizontal.		Vei	Vertical.	
	i	h.	778.	8.	5.	1 "	10	7	// ·	,	7	1,	7	1,5	<i>7</i>
Mar.	14	23		4,56	3,90	-0,66	92	28	57,96	0,20	+2,24	16	1,70	16	58,02 2,16
	15			43,49	43,30	-0,19	1 01	41	25.64	38,10	+2,47	ĺ	1,68 0,70	10	1,80
	16			22,73	22,50	-0,23	1 91		35,63 53,09	55,70			4,14	i	1,82
	17		48	1,66	1,50	-0,16 $-0,44$	an		12,09	12,80		i	2,14	1	0,64
	18 19			40,74 19,27	40,30 18,90	-0,37	1 30		31,33	29,90		1	2,56	1	0,34
	20			57,11		+0,39	1		46,88	47,40		1	.,	1	2,94
	21	0		35,87		-0,07	l	Ŭ	10,00	1.,10	, 0,00	1	1,42	1	
	22	•		14,33	14,10	-0,23	89	19	26,96	25,10	_1,86	1	0,86	1	
	23			52,53	52,20	_0,33	88	55	45,58	46,10			1,80	ł	
	24			30.13		+0,07	l	32		8,90		;	1,92	}	
	25		17	8,63	8,20	-0,43	İ	8	31,58	33,90		1	1,86	ļ.	1,92
	26			46,28	46,10	-0.18			59,28	1,60		1	2,34		5,68
	28		28	2,61	2,00	-0,61	86	58	5,42	6,20	+0,78	i	2,28	1	1,80
	29			40,04	39,90	-0,14	1	34	41,78	43,80		ĺ	3,65	1	
	30		35	18,07	17,90	-0,17			24,35	25,50		I	2,05	1	
	31		38	56,02	55,90	-0,12	85		14,09	11,40	-2,69	1	2,17	1	
April	1		42	34,32	34,10	0,22		25	2,72	2,30		Į	1,32		
•	2			12,53	12,30	-0,23	85		56,19	57,90			1,06	1	
			<b>4</b> 9	50,90	50,70	-0,20	84		1,80	58,90		ł	1,37	l	
	4				1		1	16	5,44	5,40		!	3,42	1	
	5		57	7,57	7,90	+0,33	83		13,11	17,70		l	0,82	1	
	6	1		47,01	46,70	-0.31	1		30,82	36,10		۱	3,54		
	7			25,77	25,90	+0,13		7		1,00		15	59,34	ı	
	8		8	5,59	5,20	-0,39	82		27,54	28,90	+1,36	1,6	1.00		
	9			45,03	44,90	-0.13		23	8,94	12,00	+3,06	16	1,92	1	
	10			24,87	24,70	-0,17	١.,		55,77	58,70		1	1,44	ì	
	11		19	5,31	4,90	-0,41	1 81		51,77	53,50		1	2,14	t	2,58
	12			45,55		_0,15	en		55,56	56,40	+0 84 1,74	1	0,90	l	2,00
	13			26,35	26,10	_0,25	1 00	55	9,64	7,90	-1,/4	ł	3,52	ļ	
	14		30	7,41	7,20	-0,21	80	19	2,37	57,80	-4,57	i	3,82	1	
	15			49,00	48,70	0,30			41,31	37,20		ł	1,24	ł	
	16 17			30,48	30,60 12,80	+0,12   -0,58	1 '3		27,63	26,50		l	2,88	1	
	18		41 44	13,38 55,39		-0.10	1		24,31	26,20		•	3,14		
	19			38,52	38,30	_0,22	78		32,44	36,50		Ì	1,62	i	
	20		<b>52</b>		21,70		} '		,	00,00	' -,	16	1,20	i	
	21			5,86			1	6	28,12	31,10	+2,98	1	0,64	1	
	22		59	49,95	49,70	-0,25	77		14,53	15.80		l	2,94	I	
	23	2		34,84	34,40	_0,44			11,17	12,50		!	0.18	1	
	24	_		19,45	19.50	+0,05	]		20,10	19,90	-0,20		58,60	l	
	25		11	5,65	5,00	0.65	76		41,94	44,10	+2,16	16	3.72	ļ	
	26			51,63	51,10	_0,53	1		18,05	19,30	+1,25	1	1,46	Į	0,34
	27			38,01	37,40	-0,61		8	6,94	8,10	+1,16	ľ	0.84	l	000
	28			25,29	24,50	-0,79	75		11,80	10,50	-1,30		1,64	1	3,98
	20			12,51	11,70	0,81	1		26,44	26,90	+0,46	l	1,52	i	
	30		30	0,48	0,00	0,48		12	0,12	57,80	-2,32		• • •	ļ	
May	1			48,65	48,60	0,05	74		44,38	43,10	-1,28	l	2,10	l	
•	2		37		37,70	-0,49	1		41,11	43,30	+2,19		1,40	I	
	3		41		26,40	0,89			57,39	58,60	+1,21	l		l	
	5		49	8,16	8,30	+0,14	73	43	9,71	16,10	+6,39			<u> </u>	

1830	6.	R	ight	Ascension		Error of	No	rth	Polar I	Distance	Error of	Mean Semidiameter.				
		from observation.			from N. A.	Tables.	from observation.			from N. A.	Tables	Horizontal.		Vertical.		
			m.	8.	s.	7	°	,	4	1 *	*	1	#	1	4	
May	6	2		59,15	59,60	+0,45	73	26	14,79	18,80	+4,01	}		15	59,2	
	7	_		51,77		-0,07	١	9	33,19	37,80		16	2,64	İ	57,2	
	8	3	0	44,32	44,20	0,12	72		11,53	13,40	+1,87	l	2,68	1		
	9		_	01.05	21.00	0.45		37		6.10	+4.85	1	3,28	1	59,7	
	10 11			31,65		-0,45		21	13,83	16,00	+2,17	İ	2,21	i		
	13		22	25,48	25,40	0,08	71	25	41,78 31,09	43,60		ł	A #A	1		
	14						i ''	90	55,31	32,50		l	0,70	1		
	15		28	8,42	8,60	+0,18		20	00,01	54,60	0,71	İ	0,86	l		
	16		32	6,23	5,80	-0,43	70	52	31,89	35,30	+3,41	ţ	0,52 5,40	116	1,6	
	17		••	0,20	0,00	0,20		-	01,03	30,00	70,41	i	5,32	10	1,0	
	18		40	1,97	1,90	-0,07	ĺ					l	3,56	ĺ		
	19		44	0,87	0,90	+0,03	l	12	32,15	32,60	+0,45	!	6,78	1		
	20		48	0,18	0,40	+0,22	69	59		51,80		l	5,96	1		
	21		<b>52</b>	0,10	0.30	+0,20	1	47		31,40	-2,28	!	5,96	1		
	22		56	0,84	0.90	+0,06	1	35	33,21	31 80	-1,41	l	3,74	1	1,2	
	23	4	0	1,66	1,90	+0,24	!		51,81	53.20	+1,39	1	4,62	1	2,8	
	24		4	3,51	3,80			12	34,03	35,90	+1,87	1	5,76		0,1	
	25		8	5,52	5,40	-0,12		1	35,19	40,00		1	5,58	İ	2,5	
	26		12	8,12	7,80	0,32	68	51	1,85	5,80		1	1,18	l		
	28			14,56		-0,26		30	58,41	3,10	+4,69	ì	1,40	ļ		
	29			18,42	18,10	-0,32	1	10	05.50	1 00 00		l	2,82	ı		
	30 31			22,89 27,57	22,50	-0.39 $-0.27$	1		25.59	30,20		1	2,45	1	0,5	
June	٦il			33,17	27,30 32,60	-0,27 -0,57	67		44,01 23,61	47,30		1	2,70	i		
, and	4			50,84	50,80	-0.04	"	JJ	23,01	27,30	+3,61		1,46			
	5			57,64	57,50	-0,14	•						3,78 1,94	!		
	6		57	4,65	4,60	-0,05	67	19	31,42	34,90	+3,48	İ	1,35			
	7	5		11,92		-0.02		13	31,71	35,20		ł	1,46	1		
	8		5	19,69	19,70	+0,01	l	7		59,20		Į	2,38	ĺ	1,1	
	9		9	27,86	27,60	-0,26	i	2	45,78	47,30		15	59.40	15	58,1	
	10		13	36,23	36,00	-0,23	66	58		59,70	-0,34	16	1,28	\	,	
	11			<b>44</b> 68	44,60	-0,08			35,48	36,30	+0,82	!	•	i		
	12			54,05		0,65			34,49	37,20	+2,71	1	2,10	16	1,3	
	13		26			-0,69	İ	46		2,60	+0,27	1	2,82	1		
	15			21.04		-0,14		40		7,40		l	2,82	i		
,	16		38	30,55	30,40	-0,15	ŀ		45.86	46,80	+0,94		3,60			
	17 18				39,90	0,18 0,26			48,77	50,90			2,76		1,3	
	19			49.66 58,49	49.40 59 00	+0,20			18,84 11,35	19,80	+0,96		2,60			
	20		55		8,70	-0,59			32.33	13,50 32,20	+2,15 $-0,13$	1	2,02 2,28			
	21		00	0,20	0,70	0,00			12,88	15,70	+2,82	•	0,38		3,4	
	22				i				21,88	23,90	+2,02		2,22		J,40	
	28	6	28	23,74	23,10	-0,64			53,58	54,00	+0,42	l	-,			
	30			, -					19,60	20,60	+1,00	Ī			3,38	
July	1							52		10,30	+0,33		1.98		-,50	
•	2			56,82		-0,42		<b>5</b> 6	23,07	23,40	+0,33		1.98		1,88	
	3		46	4,49	4,10	0,39					·		4,45		•	
	4					]				i i	_		1.34			
	5						<b>67</b>		28,29	30,90	+2,61		0.44			
	_6							17	21,20	20,80	-0,40		0 47			

		R	igh	t Asce	nsion	Error of	North Polar I	Distance	Error of	Mean Sem	ean Semidiameter.			
183	6.	ob	fro serv	m ation.	from N. A.		from observation.	from N. A.	Tables.	Horizontal.	Vertical.			
	_	h.	<b>m</b> .	8.	s.	•	0 / 4	1	1	/ //	/ "			
July	7 9	7	19	44 60	44.00	0.60	67 23 29,38	34,40	+5,02	16 1,62	115 50 05			
ł	10	•		44,69 49,94	44,00 49,40	-0,69 -0,54	67 37 11,21 67 44 33,17	12.20 36.00	+0.99   +2.83	0,92 15 <i>5</i> 9,88	15 59,95 58,30			
Ì	iil		•	TO,02	43,40	-0,04	67 52 21,46	22,90	+1,44	16 2,18	16 1,75			
1	12						68 0 27,90	32,50	+4,60	0,78	10 1,.0			
1	13						68 9 3,34	5,00	+1,66	3,34				
}	14		34		6,80	0,67	68 17 54,87	59,80	+4.93	1,40	İ			
1	15			10,26	10,00	0,26	68 27 13,12	16,90	+3,78	2,52				
l	16			13,09	12,70	0,39	68 36 55,13	56,10	+0,97	1,90				
l	17		46	15,22	14,80	0,42	68 46 53,39	57,10	+3,71	2,02				
1	18 19		E A	17 90	17,40	0.40	68 57 15,01	19,60	+4,59	0.70				
i	20			17,89 18,25	17,80	0,49 0,45	69 8 2,44 69 19 8,42	3,70	+1,26	0,70 1,68				
i	23		00	10,20	17,00	0,40	6) 54 30,55	8,80 28,40	+0,38   -2,15	1,26	1,06			
1	26	8	22	8,02	8,20	+0,18	70 32 48,15	48,70	+0,55	0,72	1,00			
1	27	_	26		4,60	-0,35	70 46 18,08	14,40	_3,68	15 57,72	1			
l	28		<b>30</b>		0,20	0,30	71 0 0,38	59,10	_1,28	16 1,86	15 59,12			
ļ	30						71 28 23,94	24,50	+0,56	2,18				
Aug.	2						72 13 22,47	18,90	3,57	1,70				
1	4						<b>-</b> 4 - 4 - 4 - 1			1,64				
ł	9l 10						74 8 4,46	3,10	-1,36	1,30	16 0,88			
l	14					•	74 25 34,69 75 37 <b>5</b> 2,73	30,40	<b>-4</b> ,29	0,86				
}	15						75 56 28,58	47,30 26,80	-5,43 -1,78	1,40	15 58,20			
1	16			i			76 15 19,51	19,70	+0,19	2,40	10 00,20			
ł	17	,9	46	32,10	32,00	-0,10	76 34 22,57	25,60	+3,03	0,62				
l	18	-		15,95	15,70	-0,25	76 53 43,25	44,30	+1,05	1,92	16 0,75			
i	19			ļ			77 13 18,33	15,30	_3,03	2,64	·			
i	21	10	1	24,21	23,90	-0,31		j		3,68				
l	22		^	47 00	40.00	0.00	78 12 56,01	59,80	+3,79	2,42				
Į .	23		8	47,00	46,80	-0,20	78 33 19,40	17,20	_2,20	2,05				
i	25 27		99	27,74	27,60	-0,14	79 14 25,41	24.10	-1,31	1,80 2,30				
Sep.	7	11		22,55	27,60 22,40	-0,14 -0,15	79 56 17,95	11,70	6,25	1,28				
Jack.	8			58,69	58.60	-0,09		İ	!	2,25				
1	9			34,77	34,80	+0,03	84 41 43,17	38,70	_4,47	1,26				
İ	11		17	46,79	46,70	0,09	85 27 14,99	13,90	_1,09	2,00				
1	12			22,28	22,50	+0,22	85 50 11,29	8,90	2,39	1,62	15 59,72			
}	16		35	44,70	44,60	-0,10	87 22 31,57	29,00	_2,57	1,64	58,62			
ļ	17						87 45 41,96	42,40	+0,44		16 0,84			
1	18 19		40	20 00	20.00	-L 0 00	88 8 55,10	58,30	+3,20	1,02				
l	20			30,82 6,42	30,90 6, <b>3</b> 0	+0.08   $-0.12$	88 55 36,69	36,80	+0,11	15 58,00 59,72	1,66			
1	21			42,03		<b>0,12</b> <b>0,23</b>	89 18 59,54	58,40	-1,14	16 1,38	1,00			
i	22			17,44	17,40	-0,04	89 42 24,65	21,60	_3,05	0,98	3,02			
1	23			53,26	50,03	-0,23	2.,00	,00	,	3,52	0,02			
}	24			28,85	28,80	-0,05		1	l i	15 58,60				
1	25		8	4,59	4,60	+0,01	90 52 32,54	35,20	+2,66	58,20				
1	26		11	40,99	40,70	0,29	91 16 2,37	0,00	-2,37	16 0,32				
	27						91 39 25,30	24,70	-0,60	15 57,96				
ļ	28						92 2 51,39	48,60	<b>—2,79</b>	16 1,98				

1836.		R	igh	t Asce	nsion	Error of	Nor	th :	Polar I	Distance	Error of	Mean Semidiameter.				
		from observation.			from N. A.	Tables.	from observation.			from N. A.	Tables.	Horizontal.		Vertical.		
~		ħ.	m.	8.	s.	"	0	7	,	*	7	1	*	ı ′	"	
Sep.	29	12		30,75	30,40	0,35	92	26	12,20	11,60	0,60	16	0,84			
Oct.	30 1		26	7,30	7.30	0,00						15	59,20	l		
Oct.	4			45,01 38,40	44,70 38,40	0,31 0,00	۸۵	99	40,39	41,10	+0,71	16	1,30	!		
	5		40	00,20	00,40	0,00			51,21	51,40		10	3,16	l		
	6		47	56,08	56,10	+0,02	95	9	0,74	58,10	-2,64	i	1,84	1		
	5 6 7		51		35,50	-0,05		Ū	٠,٠ ـ	1 30,20	-,01	l	0,88	l		
	8				15,40	+0,20	95	<b>55</b>	2,68	0,10	-2,58	1	0,80	ĺ		
	9			55,83	55,60	-0,23	96		54,45	54.50		i	3,32	l		
	10	13	2	36,57	36,40	-0.17	96	<b>4</b> 0	45,03	43,80	-1,23		2,92	Į.		
	11			17,78	17,60	-0,18	97		23,18	27,80		l	0,70	1		
	12			59,67	59,30	-0,37	97	<b>2</b> 6	2,62	6,00		i	1,40			
ŀ	13			41,89	41,60	-0,29			36,53	38,00	+1,47	l	2,16	l		
	14		17		24,30	+0,33	98	10	59,48	3,70	+4,22		1,70			
	15		21	7,60	7,60	0,00				i l		1	3,67			
	16 17		24	51,73	51,40	0,33						!	3,84	1		
l	18		32	20,80	20,80	0.00	00	20	22.70	32,40	1 20	1	2,92	İ		
	19		36	6,33	6,40	+0,07	100		33,70 19.10	19,20	-1,30 +0,10		4,72	l		
!	20			52,70	52,60	-0.10	100		0,87	57,10	-3,77	ł	3,57	l		
	21			39,34		0,04			25,38	25,60	+0.22		2,50	ļ		
	22			27,01	26,80	-0,21	101		44,16	44,30	+0,14	l	1,92			
	23		51	15,15	14,90	-0,25	• • •	Ŭ	,	1,	, -,	15	58,50	1		
	24			,			101	47	50,21	51,40	+1,19	16	0,58			
	25		58	53,74	53,20	0,54	102		38,39	39,10	+0,71		2,82	15	59,88	
	26						102	<b>29</b>	13,10	15,50	+2,40	1	0,82	1	•	
	28	14	10	26,42	26,20	0,22						1	1	1		
Nov.	2								43,31		+2,09	l		1		
	5 6		4 5	45 41	45 00	1 0 40			38,11				4.10	ł		
l	7			47,41	47,90	+0,49	106		46,61	47,80	+1,19		4,10	İ		
	8		43 53	48,28 48,66	47,80 48,60	-0,48 -0,06	100	19	37,40	39,40	+2,00		6,34 6,50	1		
	9			50,36	50,20	-0,00 -0,16	108	54	34,34	32,90	1,44		4,77	16	1,64	
i	10	15	i	52,81	52,60	-0,10 -0,21			34,52	34,00	-0,52		3,94	١.,	0,96	
ĺ	iii			56.57	56,00	-0,57		••	0 2,0	0 1,00	0,0.2		4,66	l	-,	
ł	12		10	0,52	0,20	-0,32	107	44	39,18	42,20	+3,02		4,45			
	13						108		45,82	48,70	+2,88		3,40	l		
ł	22				27,30	0,70			48,53		0,83		5,62	ŀ		
	23		<b>55</b>	40,60	40,40	0,20	110	23	29,13	27,40	<b>—1,73</b>		5,54	l		
	24	10		0.50		0.00	1					١	2,32			
l	25	16		9,13	9,10	-0.03	,,,	F0	0.64	0.00	1100		58,70			
	26			24,66		_0,16	110	29	8,64	9,90	+1,26	16	3,48	l		
Ī	27 28			40,86 57,6왕		-0,26 $-0,08$	111		14,52 1,82	17,30 0,70	+2,78 $-1,12$		4,77	i		
	29			15,53	15,20	0,08 0,33			20,53	20,10			2,12			
Dec.	1		~.	20,00	10,20	,			44,48	44,90	+0,42		2,56	ŀ		
	2		34	12,48	12,20	0,28			47,39	50,00	+2,61		8,86	ŀ	0,80	
i	41			53,42		+0,08			43,69	43,30	-0,39		4,00	I	-,	
	5			15,18		-0,18			29,91	31,20	+1,29		5,02	15	59,87	
	5 6		5 l	37.10	37,10	0,00	112	31	51,23	52,90	+1,67	Ì,	4,76		•	
1	7		55	59,75	59,70	-0,05	112	38	49,79	48,10			2,43			

1836.		F	ligh	t Asce	nsion	Error of	Nort	h P	olar D	istance	Error of	Mean Semidiameter.			
		ob	fro serv	m ation	from N. A.	Tables.	from observation.			from N. A.	Tables.	Horizontal.		Vertical.	
Dec.	11 12 13		13	s. 34,99 59,84	s. 34,70 59,50	-0,29 -0,34	113		57,36 38,05	0,30 40,00	+2,94 +1,95	16			*
	16 17		40		7,60	-0,25	İ	22	38,91 57,07	2,00			5,16 4,85	Ì	
	19 20 23	18	6	27,01 46,87	0,20 26,70 46,30				16,19 10,92	18,20	+2,01 +0,58		3,14 4,00	16	<b>2,3</b> 3
	24 27 28		11	13,87	13,00	0,37		20	13,43 31,57 41,18	32,70	+1,13		4,07 4,40 4,60	15 16	0,26 59,65 0,48
183	29 31	,	42	15,54	15,60	+0,06		14	24,88 20,17	24,50	-0,38		2,17 3,14	 	2,54
Jan.	2 3	••		30,60		0,10	112	50	29,64 55,34	<b>56,3</b> 0	+0,96		5,17 8,18	16	•
	5 6 7	19		18,87 42,53 5,30	18,50 41,90 <b>4,</b> 80	-0,37 $-0,63$ $-0,50$			19,13 22,36 1,01	20,80 22,60 57,60			7,34 6,8 <b>5</b> 5,85	15	57,41 58,15
	8 9 10		21	27,68 49,45 11,03	27,50 49,10 10,40	-0,18 -0,35 -0,63	111		8,08 45,93 3,92	6,20 48,60 4,90	-1,88 +2,67		6,13 3,82 3,37	16 15	1,96 59,73
	11 12 13		30 34	31,52 51,76 10,09	31,20 51,40 10,80	-0.32 $-0.36$ $-0.19$		49	55,77 20,05	55,50 20,60	-0,27 + 0,55	15	3,54 2,82 57,40	16	
	15 16		03	10,03	10,00	-0,13	011		3,41 52,15	5,90 52,00		16			57,07
	17 18 19	20	4	53,92	<i>5</i> 3,30	0,62		34	11,47 15,28 51,43	14,30 12,90 48,40	+2,83 -2,38 -3,03		3,34 2,47		
	20 21 22			7,82 21,38 34,63	7,70 21,40 34,40	-0.12 +0.02 -0.23	109		2,85 54,25 21,28	1,00 50,90 18,70	-1,85 -3,35 -2,58	15 16	59,93 59,37 1,52	16	59,07 57,48 0,17
	23 24 25			46,83 58,45 8,79	46,60 58,00 8,60	-0,23 -0,45 -0,19	108	28 14	24,67 5,85 28,16	24,60 8,90 32,10	+3,05		1,80 2,74 2,92		1,19 2,06
	26 27 28		34 38	18,46 27,78 36,22	18,40 27,50 35,70	-0,06 -0,28 -0,52		44 29	29,49 12,39 34,71	34,50 16,50 38,30	+5,01 +4,11 +3,59	15 16	59,00 2,28 2,05	15 16	58,02 58,97 1,00
	29 30		46	43,54 50,31	43,10 49,70	-0,52 -0,44 -0,61	107	<b>57</b>	36,06 21,06	40,40 23,20	+4,34 +2,14		$\begin{array}{c} 5,32 \\ 2,02 \end{array}$		57,80
Fe <b>b.</b>	31 1 2	21	<b>59</b>		0,50 4,60	0.30 0,06	106	<b>5</b> 0	49,33 3 <b>5</b> ,36		+3,07 +4.24		2,45 2,08 5,02		59,15
	3 4 5			8,55 10,75 12,96	8,00 10,60 12,40	-0.55 $-0.15$ $-0.56$	105	15	6,15 17,07 18,11	9,10 21,30 16,70	+2,95   $+4,23$   $-1,41$		2,52 1,62 2,14		
	6 7 8		19 23	13,84 13,43 12,69	13,30 13,30 12,60	0,54 0.13 0,09		38	56,60 31,04	55,70 26,00	<b>—0,90</b>		1,00 1,98 3,30	16	4,07
	9		~ .	1~,00	12,00		104				<b>2,72</b>		0,00		1,92

		R	ight	Ascen	sion	Error of	Nort	h P	olar D	istance	Error of	Mea	n Semi	diam	eter.
183	7.	obs	fron erva	tion.	from N. A.	Tables.		fron erva	n tion.	from N. A.	Tables.	Horizonta  16 2,46 1,27 2,09 1,76 1,74 2,99 0,88 2,5 1,5 3,0 0,3 2,2 4,7 1,4 1,7 15 55,3 57,3 59,0 16 0,9 1,2 15 15,3 1,8 1,9 1,9 1,10 1,10 1,10 1,10 1,10 1,10 1	izontal.	Vei	rtical.
		ħ.		s.	s,	10.10	104	, 00	51,27	55.00	7,50	1,0	7	$\overline{\Gamma}'$	7
Feb.	10	21	39	8,67 5,92	8,80 5,70	+0,13 $-0,22$	104		16,34	55,80 18,00	+4,53 +1,66	10		16	3,24
	12		UJ	0,52	5,70	0,22	103		26,17		+2,33	l	1,21		59,50
	13		46	57,52	57,19	0,33	1		19,59		+5,01		2,02	16	2,55
1	14			52,04	51,60	-0,44	1	3	1,25		+6,55	l	1,70		59,47
	15			45,65	45,40	-0,25	102		33,40		+5,10	1	1,70	16	3,02
	16			39,21	38,50	-0,71		21	56,40		+0,60	ļ .	1,44	15	59,15
ł	17	22		31,79	30,90	0,89		1	2,63		+1,27	1	2,90	16	1,15
ŀ	18			23,08	22,20		101		58,03		+1,47	1	0,86	1	1,67
	19			13.54	13,10		1,00		43,42			1	2,58	1	4,00
ł	20 21		14	3,94	3,30		100		14,04		+3,96	1		1	0,68
ĺ	24		17	53,19	52,80	-0,39	1	30	41,40	42,10	+0,70	1		1	0,00
1	25					!	İ			i		1		!	
Į	26		36	51,43	51,10	0,33	98	45	19,56	23,50	+3,94		4,76	1	,
l	27	l		37,34	37,10	-0,24	! "		50,37			l .	1,40	1	0,92
1	28	ł		22,94	22,70		į		15,85			1	1,70	15	59,84
Mar.	1	ŀ	48	7,99	7,80		97	37	33,63			15		16	
	2		<b>52</b>	52,19	52,30	+0,11	ĺ		44,47		+0,73	1	57,38	15	57,64
1	2 3 4 5 6 7	l		36,17	36,30	+0,13	96		51,38				<b>59,08</b>	16	•
ł	4			19,70	19,80	+0,10	1		46,86			16		•	2,61
i	5	23		2,83	2,80	-0,03	۱		39,77			1	1,20	1	
1	6	1		45,61	45,40	-0,21	95		26,66			•	•	١.,	1,62
l	8	!		27,32	27,40	+0,08	1		11,27			1 10			57,75
1	9		14	9,22 50,52	9,20 50,60	-0.02 +0.08	94		52,63 23,38			i		16	1,50 3,07
Į.	10		21	31,50	31,60		1		55,18			}	1,80	1	4,78
1	11			12,64			93		20,21			ĺ	1,58	15	59,45
ł	12			52,29					42,75			1	2,58	16	
1	13			32,85			92	58				1	2,47		58,46
Į.	14		•	•		} `		34	31,86	33,40	+1,54	1	0,50	1	59,66
i	15	i			İ				<i>5</i> 3,36			1	3,37	1	59,74
1	16						91		10,81			1	2,05	16	•
1	17		47	9,35	9,80	+0,45	1		29,01			1	0,98	1	0,62
1	18				1	1	1 90		47,86				59,45	1	EO 60
1	19 20						i		14,59 29,46			16	1,48 2,82	16	59,62
1	21				1	1	89		45,32			15	55,82	110	1,04
1	22				1	1	! "		5,56			16		1	1,15
i	23	1 0	8 (	59,74	59,70	-0,04			24,70			i	1,40	i	0,37
1	24	L)	12	37,77	37,70		88		47,97			15	59,34	15	59,86
	25	5		15,17			1	14	12,12	16,20	+4,08	16			,
	26				į		87		44,10	43,80	0,30	1	1,44	1	
İ	27			31,73			1		13,12			1	0,87	16	
1	28		27						45,31			1	0,84		2,84
1	29			46,71			1 86		21,81			ì	0,48	1	1,39
!	30 31			25,55			0.5	17				1	1,25	115	58,96
April			38 41	3,24 41,90			1 00		47,78			ł	1,97	1	59,87
when	, ,	2		19,99			İ		33,79 33,40			1	0,64	}	
1	9	3		58,45			84		34,53			1	0,35	16	1,40

1000	,	R	light	Ascer	nsion	Error of	North Polar D	istance	Error of	Mean Sem	idiameter.
1837	'·	ob	fro	m ation.	from N. A.	Tables.	from observation.	from N. A.	Tables.	Horizontal.    16 0,77	Vertical.
April	4	ħ.	m.	8.	s.	*	84 21 37,58	32,50		16 0,77	16 2,02
	5 6						83 58 41,87 36 0,39	42,40 58,50			4,15 3,68
	7	1	3	33,78	33,90	+0,12	13 21,02	21,00	0,02	59,80	İ
	8			13,40 52,96	13,20 52,90	0,20 0,06	82 50 49,49 28 26,31	50,60 27,50			3,24
	11			12,83	12,80	0,03	81 44 5,52	4,70		1,43	15 58,84
	12			52,92	53,20	+0,28	22 6,05	5,70	-0,35		16 0,85
	13 14			33,83 15,06	33,80 14,70	0,03 0,36	0 17,62 80 38 38,25	15,50 34,20	-2,12 -4,05		15 58,22 58,44
	15			55,94	55,90	-0,04	17 4,54	2,30	-2,24	1,62	57,18
	16 17		40	10.21	19,50		79 55 44,21 34 33,32	40,30 28,40	3,91 4,92		16 2,16
	18		44	19,31 2,02	1,80	+0.19 $-0.22$	13 25,28	26,70	-4,92 $+1,42$		2,38 0,95
	19		47	44,38,	44,50	+0,12	78 52 28,82	35,80	+6,98	4,45	15 58,25
	20 21			27,87 11,20	27,60 11,20	-0,27 0,00	31 53,18 11 26,64	55,80 27,10	$+2,62 \\ +0,46$		16   1,02   15   59,62
	22			55,42	55,10	0,32	77 52 6,64	10,00	+3,36		16 0,87
	23	2		39,60	39,60	0,00	32 4,97	4,60	-0,37		15 58,43
	24 25			24,63   10,23	24,50 9,90	-0.13 $-0.33$	11 11,68 76 51 32,63	11,50 30,90	-0.18 $-1.73$		16 0,68   15 59,71
	26			55,95	55,80	-0,15	32 2,22	3,00	+0,78	1,70	16 0,34
	27			42,43	42,10	-0,33	12 48,79 75 53 46,03	48,10			1,44
	28 29		21 25	29,50 17,16	29,10 16,60	-0,40 -0,56	35 1,97	46,70 59,00	+0,67 -2,97		15 59,97 59,87
	30		29	4,70	4,60	-0,10	16 26,24	25,70	-0,54	2,32	59,08
May	1  2			53,35 42,35	53,10 42,20	-0.25 -0.15	74 58 11,16 40 1.39	6,60 2,30	-4,56 + 0,91		16 0,33 1,64
	3			32,24	31,90	-0.34	22 10,71		+2,39		1,86
	4		44	22,34	22,20	0,14	4 34,51	39,30	+4,79		1,44
	5 6			İ	- 1		73 47 17,31 30 15,14	21,30 19,40	+3,99 +4,26	15 59,44	15 59,56 16 0,72
	8j				i		72 57 0,56	5,00	+4,44	16 1,10	15 57,56
	9 10	•	-	25.40	35,40	0,02	40 49,11 24 56,36	53,30 58,90	+4.19 +2.54	0,60 1,98	16 1,00
	11	3	7 11	35,42 29,69	29,40	-0,02 $-0,29$	9 20,37	22,30	+1,93	1,37	0,24
	12		15	24,40	24,10	0,30	71 54 2,65	3,60	+0,95	0,46	1,95
	13 14						39 2,27 24 19,24	3,30 21,50	+1,03 +2,26	1,90	
	15						9 56,97	58,60	+1,63	2.05	]
	16						70 55 53,51	54,80	+1,29	0,64	
	17 18						42 7,03 28 52,05	10,40 45,50		15 59,62	
	23						<b>69</b> 26 43,39	43,10	-0.29		 
	24 25	4	3 7	• 1	3,90	-0,38 -0.57	15 19,85 4 18.85	20,70 19,50	+0,85 +0,65	16 2,56 1,82	4,10
	28	Ì	7	6,37	5,80	0,57	68 33 20,71	25,60	+4,89	0,48	3,10
	29								. /	2,78	İ
	30 31			23,03 27,76	22,70 27,50	<b>0.33</b> <b>0,26</b>	5 45,45	51,30	+5,85	$\begin{smallmatrix}2,47\end{smallmatrix}$	1
June	31 1		01	21,10	21,00		67 57 27,01			1,04	1

1027		R	ight	Ascen	sion	Error of	North	Po	olar Di	stance	Error of	Mea	n Sem	idiameter.
1837			fron erva	tion.	from N. A.	Tables.	fro observ	om vat		from N. A.	Tables.	Hori	zontal.	Vertical.
June	2	h.		s. 38,21	s. 38,30	+0,09	67 4		18,24	21,90	+3,66	16	0,82	1
June	3	4	39	00,41	38,30	70,03			42,13	41,90	-0,23	10	1,02	
Ì	4				}				20,93		+4,27	1	1,37	i
	5	4	51	57,48	57,70				30,29	32,20	+1,91		1,06	15 58,87
	6	_	56	4,75		+0,05	! 2	0 .	59,23	2,70	: '	1	2,22	
l	7	5		12,30	12,30	0,00			54,06	57,10	+3,04		1,35	50
	8 9	i		20,40 28,32	20,00	$\begin{bmatrix} -0,40 \\ -0,42 \end{bmatrix}$			13,66 55,99		+1,74 +1,91	1	1,66 <b>4</b> ,40	58,76
	10			36,58	36,20		66 5		5,40	4,60	-0,80		1,66	
!	11			45,11	44,60				34,62			1	3,54	
	12			53,30		0,00			33,05		-1,95	1	2,82	ł
1	13		25	2,12		-0,02			44,64			1	1,75	1
1	14			10,98					36,19				0.86	1
!	15			20,60					43,80			1	0,57	
	16 17			29,79 38,61					15,72 14,74				$0,02 \\ 0,72$	
ł	18		41	,,,,,,	1 30,70	1 0,00			33,70	1 ' '		15	59,84	1
i	19				1	1			26,08			16		1
ĺ	22	6		25,94					17,08			1	2,52	
1	23			35,60					44,25				0,75	ľ
	24			44,76					30,50				59,50	i
1	25			54,20					55,90	1 '		16		i
1	26 27		19	3,92 12,43					31,31 41,04			16	0,7 <i>5</i> 0,88	<b>]</b>
ł	29		31					14					59,95	
1	30			39,5					24,98				57,82	
July	j	1		•		1	1 .	51	11,67	9,70			59,20	İ
1	9	2				. i	1 .	55	20,18	18,00	-2,18	!	<b>5</b> 9,95	
Ì	;	3	48	3 4,9	4,0	0 -0,92	1 ~-		40.40	ا			58.58	1
	•	4					67		46,40			16		
1	•	5 6			ļ	i		10 15	6,79 <b>52,8</b> 6			16	0,70 59,95	ł
1		7			1			$\frac{10}{22}$				16		
1		8	7 8	39,5	8 39,0	0 -0,58			23,87				0,86	i
1		9		2 44,9					26,79	27,00	+0,21	!	1,35	1
1		0		6 50,1					39,51				1,77	1
1		1		0 55,4					28,30			1	1,30	
1	1	2	2	4 59,8 8 4,6	4 59,8 2 3,9	$\begin{bmatrix} 0 & -0.04 \\ 0 & -0.72 \end{bmatrix}$			25,29 52,98		$0 + 5,61 \\ 0 + 4,85$	ł	2,45	1
		4	3						38,20			1.5	59,34	i
1		5		7 11,5					58,0					ł
	1	6		1 13,3				34	25,74	32,1	0		1,12	ŀ
1		7			4	1	į .		25,30					
}		8		9 17,4					35,59				59,50	
1		9		3 18,5				5	21,2	1 22,6	0   +1,39	16	2,30	
ļ		23		7 18,5 9 16,7				51	28,40	25.0	0 _3,40		1,06	i
1		24	•	J 10,1	10,0				48,69				0,08	
!	2	25			1		1."		24,9				٥,٠٥	1
	2	27			1			42	2 54,4	1 51,8	0   - 2,61	1		1
I	2	28	2	9 3,0	4 2,3	0   -0,74	1	<b>5</b> 6	29,10	6 32,2	0 + 3,04	.	0,37	

183	7	R	igh	t Ascer	sion	Error of	No	th ]	Polar 1	Dista	nce	Error of	Mea	n Semi	diameter.
100	.		fror erva	n ation.	from N. A.	Tables.		fror	n ation	fro N.	m A.	Tables.	Hori	zontal.	Vertical.
	20	h. :	m.	8.	3.	8.	0	/	"		*	1 "	1 .	*	
July	29						71		34,87		,60	-2,27	16	1,62	į
	30					i	i		47,94		,60	+2,66		2,14	
A	31		40	04.01	00.50	0.51			26,92		,10	-0,82	16	2,27	ļ
Aug.	2 3		48	34,21	33,70	0,51	72	9	30,94	33	,10	+2,16		59,56	
						1	1	-0	~0 O1	1.	^^	1.050		59,07	ļ
ŀ	5 7	9	m	40.60	40.40	0.00			53,21		,00	+0,79	16	0,70	
l	9	9		49,62	49,40	-0,22			50,51		,20	+0,69	!	0,82	i
•	10			27,73	27,50	-0,23	74		53,13		,10	-1,03	l	1,50	
	11			16,00	15,70	-0,30	1		13,34		,60	+3,26	1	1,24	Ì
	12		23	3,65	3,30	0,35	1		55,51		,10	-1,41	1	0,95	
l	13			50,67 36,80	50,20	-0,47	75		50,33		,30	-3,03	10	1,06	i
ļ	20		30	50,60	36,70	<b>—0,10</b>		15 28			,90	1 2 60	16	0,20	l
1	21	10	۸	29,38	28,90	-0,48	l ′′	20	1,20	4	,80	+3,60	10	58,74	i
1	22	10		10,69	10,80		78	7	54,37	50	,80	+5,43	16	0,64	}
i	23			52,48	52,20	-0,28	۱′۰	28	9,16		,50 ,50	+4,34	16	0,04	
!	24			33,31	33,20	-0,11	l		38,59		,30	+1,71		59,8 <b>4</b>	
l	25			00,01	00,20	-0,	70		13,15		,90	+3,75		59,12	i
l	28		26	13,48	13,40	-0,08	1 ''	J	10,10	1.0	,50	1 70,70	16	0,64	l
ł	29			52,51				33	22,19	24	,80	+2,61	10	1,44	i
l	30		20	02,01	1 02,00				55,36		,50	<b>—4,86</b>	1	0,28	j
1	31					i	81		20,96		,90	+3,94	16	0,55	}
Sep.	1					1	١٠٠	38	7,20		,70	+0,50		59,92	<b>!</b> ·
	2				ł	1			56,01		,60	+1,59	."	00,02	
ļ					1	ļ	82	44			,00	+1,43	16	1,10	İ
1	4 5 6 7				Ì	į.	83		11,36		,00	+3,64	16	2,98	l
ļ	6				İ	ł			42,06		,70	1 ' ' ' '		58,65	
l	7				i	l	1		57,29		,80	+3,51	16	1,80	1
ļ	8				l	!	84	13	32,39	33	,00	+0,61		59,64	
l	9	11	9	43,18	42,70	0,48		36	11,18	11	,90	+0,72	15	59,70	
•	10				l	ł	1	58	<b>57</b> ,69	53	,90	3,79	16	2,20	Ì
1	11				1	1	85		44,47		,00	2,47	15	59,82	i
1	12			30,11	30,00	-0,11	l		40,46		,80	4,66	16	0,86	1
l	13		24		5,50		86	7	32,11	32	,10	-0,01	1	0,60	l .
]	14			41,20	40,90	-0,30	l		36,22		,40	2,82	]	1,17	
1	15			16,69	16,40	-0,29			37,86		,40	+0,54		0,52	
}	16		34		51,70	-0.08	87		48,83		,00	1,83		0,37	
1	17			27,60	27,00	-0,60		<i>ა</i> ყ	55,75	158	,70	+2.95	l	1,15	1
	18 19		42	2,70 37,76	2,40	-0,30	88	ე ი_	11,53	13	,30	+1,77	1	0,66	1
	20			13,46	37,80 13,20		1	40	31,04 51,21	50	,60	+0,56	1	1,37	ļ
1	21			48,59	48,70		90		14,71		,20 ,60	-1,01 -2,11	l	0,20	i
	22			24,38	24,20		ا	36	39,94	34	,00 ,70	-2,11 -5,24	16	$0,22 \\ 0,77$	
	23				0,00		gn	0			,10	-3,24 -3,55		59,77	1
1	24			35,65	35,90		1 33		29,99		,30	<b>—5,69</b>	16	1,44	
1	25			12,08	11,80		i		51,60		,30	-1,30	16	0,55	
1	26			48,25	48,10		91		17,76		,20	-1,56		59,9 <b>7</b>	1
	27			24,73	24,50		١ " ا		41,44		,20	+0,76	16	1,06	i
	28		18		1,00		i		11,49		,70	-3,79	i - Ŭ	-,00	
Oct.	5		-	,	1	1	94		21,17		,50	-1,67		0,22	1
1	6	3			l	1	95		31,37		,10	-4,27	1	0,48	1

100	_	R	ight	Ascen	sion	Error of	Nort	h P	olar D	istance	Error of	Me	an Semi	diameter.
1837	'·	obs	fro	m ation.	from N. A.	Tables.	obs	fror erva	n tion.	from N A.	Tables.	Mean Semi Horizontal  16 0,57 1,12 16 0,28 15 59,68 16 1,90 0,92 0,22 15 59,12 15 59,42 16 0,60 15 59,42 16 0,60 15 58,18 15 59,56 16 0,30 15 59,56 16 0,48 15 59,75 16 0,48 15 59,75 16 0,84 15 59,75 16 0,84 15 59,75 16 0,84 15 58,98 16 0,00 15 58,98 16 1,75 16 1,08 15 58,90	Vertical.	
Oct.	7	h.	m.	8.	*	*	0	95	34,32	30,90	<b>-3,42</b>	l		
oc.	9					1			34,75	25,30	0,42	10		l
	10	13	1	43,52	43,10	-0,42	"		18,17	15,00	-3,17	16		l
	11		-	20,02	20,20	,,,,,	1		58,43	59,30				
	12		9	6,76	5,50	-1,26	97		41,73	37,80				i
	13			47,81	47,40	-0,41	Ì	43	5,97	10,30				1
	14			30,42		0,62	98	1	34,99	36,40		ĺ		
	16			56,83		-0,33	l	50	4,12	8,20	+4,08		•	!
	17			Ť			99	12	7,14	12,90	+5,76	15	59,12	
	18						l	34	9,93	9.60		15		1
	21				·	i			14,10			16		ļ
	22				ŀ		101		36,05					
	23								38,86					l
	24								48,59				•	ł
	25						102		35,41				0,60	
Nov.	6								35,31					
	13			1		l			52,56		+2,84			
	19	15	46	10.00	10.00	0.06	108	04	<b>43</b> ,63	10,50		10	2,50	
	21	19	40	13,36	13,30	<b>0,</b> 06	110	20	EE 07	40.00		16	0.22	
	24 25			,			1110		55,07	49,20	4.65	10	0,33	
	26						1		54,35 25,09			15	50 56	
	27		11	39,48	38,70	0,78	111		44,51		, ,	19	39,30	
	29			00,20	30,70		1 1 1 1		55,64			16	0.48	
	30					·	1		59,22					
Dec.	i						1		35,62	33,20		10	00,70	
Dec.	ું					l	İ		46,46			16	0.84	
	2 10						112	55	35,78	35,00				}
	11						113		53,21					
	14					l			42,49					
	15						}	17	6,12	7,70				i
	16					l	i		59,82		+3,28	16	1.08	
	19	17		55,27	55,00	0,27		27	59,57	1,10	+1,53	15	<b>58,90</b>	
	20		<b>52</b>	21,83	21,60	-0,23	i	27	4,85			15	<i>5</i> 9,38	
	21		56	48,22	48,20	-0,02	1		35,43		+3,27			
	22					}		27	51,48	45.00				
	23				0.46	1			24,09			i		
	24	18		8,56		-0,16	1	26	32,87	32,50	0,37	1		
	25			35,43		-0,23	l	60	00.40	00.00	1000	!		
	26				1,70	-0,34	!		26,43	26,70	+0,27	l		
	27			28,67	28,10	0,57 0,89	1	21	9,34	11,40	+2,06	l		
	28			55,39	54,50		1	1 =	15 20	16 40	4101	l		
	29		JZ	21,35	20,80	0,55	j		15,39	16,40 36,70	+1.01	1		
	30 31			1		1	l		34,39 32,70			l		
	31					1	1	•	02,10	23,10	0,00	l		
					1	l	İ			1 1		l		

In conformity with the plan followed in former volumes, I have here computed the value of the Mean Semidiameter of the Sun, from the observed transits—not that I have ever for a moment expected to obtain a very accurate determination by this means,—but rather from a desire of tracing the changes, if any, which might result in the method of estimating time from continued practice: the result has been simply this,—that the observer who at first observed a larger diameter than myself, has, after two or three years practice in observing, continued to observe the same larger diameter; and another Assistant who appeared to note the Diameter in defect, has continued to do so: Among the circle observations too, there appears to be the same cause in opperation,—each observer sees the Sun under a different angle, or forms a different judgment with regard to his being in contact with the wire; the results altogether are as follows—

						n's Mean S rizontal.		meter. rtical.
					•	*	,	*
From 965 Ob	oservations in fo	rmer years	===		16	1,48		
141			==	-			16	1,59
<b>4</b> 89	18	36 and 1837	==			1,72		
150	<del></del>		==					0.77

Selecting from the above observations those made near to the Solstices, we will proceed to compute the value of the Obliquity of the Ecliptic—

Observations of the Sun made near to the Summer Solstices of 1836 and 1837 applied to the determination of the Obliquity of the Ecliptic.

								Ī			Corr	ectio	n for		Mean Josticial
1836	6.	N	I. P	P. D.	R	edu	ction.	⊙'s Lat.		lsticial P. D.	)r  Nut.	+	r Nut. t. 0",46	N Re	I. P. D. educed to Jan. 1.
		0	,	7	0		*	1	•	, .	"	T	*	0	1 7
May	21	69	47	33,68	3	15	16,70	+0,93	66 3	2 17,91	+6,05	:   <b>-</b>	-0,51	66	32 23,45
	22	69	35	33,21	3	3	16,46	0,95		17,70	,06		,52		23,24
	23	69	23	51,81	2	51	38,46	0,93		13,28	,06		,53		18,81
	24	69	12	34,03	2	40	20,18	0,89		14,74	,07		,53		20,28
	25	69	1	35,19	2	29	24,62	0,81		11,38	,08	İ	,54		16,92
	26	68	51	1,85	2	18	49,76	0.72		12,81	,09	1	,55		18,35
	28	68	30	58,41	1	58	47,03	0,48		11,86	,09		,57		17,38
	30	68	12	25,59	1	40	13,33	0,21		12,47			,58		17,99
	31	68	3	44,01	1	31	30,50	0,09		13,60	,11	1	,60		19,11
June	1	<b>67</b>	55	23,69	1	23	9,60	-0,02		14,07	,12	1	,61		19,58
	6	67	19	31,42	0	47	18,15	0,19		13,08	,17	1	,67		18,58
	7	67	13	31,71	0	41	18,70	0,13		12,88	,18		,68		18,38
	8	67	7	53,48	0	35	42,88	0.04		10,56	,19	1	,69		16,06
	9	67	2	45,78	0	30	31,00	+0,05		14,83	,20		,71		20,32
	10	66	58	0,04	0	25	43,39	0.18		16,83	,20		,71		22,32
	• 11	66	53	35,48	0	21	20,24	0,30		15,54	,21	ı	,72		21,03

					Correc	tion for	Mean Solsticial
1836.	N. P. D.	Reduction.	⊙'s Lat.	Solsticial N. P. D.	) r Nut.	Or Nut. + t 0",46 365	N. P. D. Reduced to Jan. 1
June 12	66 49 34,49	0 17 20,82	1 0 43	66 32 14,10	+6,22	_0,72	66 32 19,60
13	66 46 2,33	0 17 20,82	,56	15,74	,23	,73	21,24
15	66 40 2,00	0 7 51,77	78,	11,01	,24	,74	16,51
16	66 37 45,86	0 5 31,20	,85	15,51	,25	74	21,02
17	66 35 48,77	0 3 35,42	,89	14,24	,26	,75	19,75
18	66 34 18,84	0 2 4,43	,92	15,33	,26	,75	20,84
19	66 33 11,35	0 0 58,40	,91	13,86	,27	,75	19,38
20	66 32 32,33	0 0 16,83	,87	16,37	,27	,75	21,89
28	66 41 53,58	0 9 38,20	- ,04	15,34	,31	,76	20,92
July 2	66 56 23,07	0 24 8,50	,27	14,30	,33	,74	19,89
9	67 37 11,21	1 4 57,63		13,92	,36	,68	19,60
10	67 44 33,17	1 12 21,32	,47	12,32	,36	,67	18,01
14	68 17 54,87	1 45 46,15	,82	9,54	,38	,65	15,27
15	68 27 13,12	1 55 2,56	,85	11,41	,38	,64	17,15
16	68 36 55,13	2 4 42,26	,84	13,71	,39	,61	19,49
17	68 46 53,39	2 14 42,40	,80	11,79	,39	,60	17,58
19	69 8 2,44	2 35 48,40	,65	14,69	,41	,58	20,52
20	69 19 8,42	2 46 54,97	,54	13,99	,42	,57	19,84
1837.	60 15 10 05	0.49.4.00	0.00	66 32 15,26	17707	1 050 1	ee oo oo 70
May 24 25	69 15 19,85	2 43 4,29 2 32 2,59		15,97	+7,97	-0,53	66 32 22,70
31	69 4 18,85 68 5 45,45	1 33 36,11	-0.29 + 0.27	9,61	7,97	,54	23,40 17,02
June 2	67 49 18,24	1 17 8,00	,53	10,77	8,01 ,02	,60 ,62	18,17
5 June 2	67 27 30,29	0 55 18,53	,82	12,58	,02	,66	19,95
6	67 20 59,23	0 48 48,88	,86	11,21	,03	,67	18,57
7	67 14 54,06	42 43,15	,89	11,80	,03	,68	19,15
8	67 9 13,66	37 1,03	,87	13,50	,04	,69	20,85
9	67 3 55,99	31 43,60		13,22	,04	,71	20,55
10	66 56 5,40	26 50,27	,77	15,90	,04	71	23,23
11	66 54 34,62	22 21,10	,67	14,19	,04	,72	21,51
12	66 50 33,05	18 16,87	,56	16,74	,05	,72	24,07
13	66 46 44,64	14 36,63	,43	8,44	,05	,73	15,76
14	66 43 36,19	11 21,00	,30	15,49	,05	,73	22,81
15	66 40 43,80		+0,17	14,41	,05	,74	21,72
16	66 38 15,72	6 3,15		12,63	,06	,74	19,95
17	66 36 14,74	4 1,67	0,05		,06	,75	21,33
22	66 32 17,08	0 4,25	,22	12,61	,10	,76	19,95
23	66 32 44,25	0 31,16	,16	12,93	,10	,76	20,27
24	66 33 30,50	1 22,80	,07	7,63	,10	,76	14,97
25	66 34 55,90	2 39,25		16,68	,10	,76	24,02
26 27	66 36 31,31 66 38 41,04	4 20,67	,15	10,79	,11	,76	18,14
27	66 44 2,47	6 26,92 11 51,98	,29 ,55	14,41 11,04	,11	,76	21,76
. 30	66 47 24,98	15 11,82	,66	13,82	,12 ,12	,75 ,75	18,41 21,19
July 8	67 28 23,87	56 19,00	,72	5,59	,12 ,14	,69	13,04
l sury 9	67 35 26,79	1 3 19,28	,61	8,12	,14	,68	15,58
10	67 42 39,51	10 31,00	,49	9,00	,14	,67	16,47
ii	67 50 28,30	18 12,75	,35	15,90	,14	,66	23,38
12	67 58 25,29	26 16,57	,22	8,94	,15	,66	16,43
13	68 6 52,95	34 46,32	,10	6,73	,15	,65	13,23
14	68 15 38,20	. 43 33,68	- ,01	4,51	,16	,64	12,03

					Correc	tion for	Mean Solsticial
1837.	N. P. D.	Reduction.	⊙'s   Lat.	Solsticial N. P. D.	) r Nut.	⊙ r Nut. +t. 0",46 365	N. P. D.
	0 / 4	0 / "	"	0 / "	7	1 *	0 / 4
July 15	68 24 58,01	1 52 46,14	-0,10	66 32 11,77	+8,16	-0,62	66 32 19,31
16	68 34 25,74	2 2 17,60	,17	7,97	,17	,61	15,53
18	68 54 35,59	22 30,90	,22	4,47	,17	,59	12,05
19	69 5 21,21	33 9,63	,20	11,38	,18	,58	18,98
23	69 51 28,40	3 19 11,47		17,06	,21	,54	24,73

Observations of the Sun made near to the Winter Solstices of 1836 and 1837 applied to the determination of the Obliquity of the Ecliptic.

			[			Correc	tion for	Mean Solsticial
183	86.	N. P. D.	Reduction.	⊙'s Lat.	Solsticial N. P. D.	) r Nut.	Or Nut +t. 0°,46 365	N. P. D.
1		0 / 4	0 / "	7	0 / 4	"	7 7	0 / 11
Jan.	2	113 0 25,15		+0,07	113 27 40,00	-5,08	+0,49	113 27 35,41
ļ	3	112 55 8,28	0 32 30,79	+0,18	39,25	,09	,48	33,84
1	4	1112 49 28,38		+0,29	42,86	,10	,47	38,23
1	6	112 36 37,82		+0,42	40,18	,11	,45	36,52
1	7	112 29 32,95		+0,44	39,84	,12	,44	35,16
ļ	8	1112 22 5,58	1 5 37,05	+0,44	43,07	,13	,43	38,37
ł	9	112 14 5,82		+0,40	40,20		,43	35,50
1		1112 5 43,26		+0,33	41,94	,14	,42	37,22
İ	11 13	1111 56 52,36		+0,23	41,09	,15	,41	36,25
1	13	111 37 58,00 111 27 50.49		0,00	42,63	,16	,39	37,86
Į		111 27 50,49 1111 6 28,03	1 59 50,06 2 21 16,79	-0.12 -0.37	40,41	,17	,38	35,62
1	17	110 55 7,89		-0.37 -0.47	44,45	, ,	,37	39,64
1	18	110 43 25,71	2 44 19.65	_0,55	43,40 44,81	,19	,34	38,55 39,94
ľ		110 31 16.97	2 56 27.53	-0.62	42,88	,10 ,21	,33 ,31	37,98
1		110 5 55,61	3 21 51.55	-0.65	46,51		,27	41,55
Nov.		110 10 48,53		0,19	42,86	,23 -7,11	+0,68	36,43
1		110 23 29.13		-0.06	44,47	,ii	,70	38,06
i	26	110 59 8,64		+0.23	42,35	,13	75	35,97
1	27	111 10 14,52	2 17 26,00	+0,30	40,82	,14	77	34,45
i	28	111 21 1,82		+0.32	44,81	,14	,79	38,46
!	29	111 31 20,53	1 56 22,90	+0,33	43,76	,15	,80	37,41
Dec.	2	111 59 47,39		+0.15	41,15	,17	,84	34,82
Ī	4	112 16 43,69		0,08	44,79	,18	,87	38,48
ì		1112 24 29,91	1 3 13,00	-0.22	42,69	,18	,88	36,39
į.	6	112 31 51,23	0 55 51,70	[-0,35]	42,58	,19	,89	36,28
1	7	112 38 49,79	0 48 56,56	0,48	45,87	,19	,90	39,58
i		113 1 57,36		0,81	41,32	,21	,94	35,05
1	12	113 6 38,05		0,83	42,20	,21	,95	35,94
1	17	113 22 57,07		-0,49	39,66	,24	,98	33,40
1	19	1113 26 16,19		-0.23		,25	,99	36,26
	23	113 27 10,92	1	+0,22		,27	,99	38,82
1	24	1113 26 13,43		+0,28	44,04	,27	,99	38,76
l	31	1113 6 20,17	0 21 20,46	·—0,06	1 40,57	,30	,97	34,24

										Correc	tion for	Mean Solsticial
183	7.	N.	Р.	D.	R	educ	ction.	⊙'s Lat.	Solsticial N. P. D.	) r Nut.	Or Nut. +t. 0".46 365	N. P. D.
		0	′	*	0	7	*	7	0 / 4	*	1 "	0 / 4
Jan.	3	112	<b>50</b>	55,34	+0	36	49,08	0,43	113 27 43,99	<b>—7,32</b>	+0,49	113 27 37,16
İ	5	112	38	19,13		49	25,07	,65	43,55	,33	,46	36,68
ł	6	112	31	22,36	l	56	23,83	,73	45,46	,34	,45	38,57
	7	112	24	1,01	1	3	47,85	,79	48,07	,34	,44	41,17
1	8	112	16	8,08		11	40,08	,82	47,34	,35	,43	40,42
	9	112	7	45,93	1	19	57,60	,81	42,72	,36	,43	35,79
· .	10	111	59	3,92	l	28	41,81	,78	44,95	,37	,42	38,00
	11	111	<b>4</b> 9	55,77		37	50,82	,72	45,87	,38	,41	. 38,90
	12	111	40	20,05		47	26,00	0,63	45,42	,38	,40	38,44
ì	19	110	21	51,43	3	5	58,15	+0,21	49,79	,40	,31	42,70
	20	110	9	2,85		18	44,05	+0.29	47,19	,41	,30	40,08
Dec.	19	113	25	59,57		1	44,67	-0,04	44,20	-8,65	,99	36,54
	20	ŀ	27	4,85		0	41,78	,16		,65	,99	38,81
	21	!	27	35,43		0	7,33	,30	42,46	,66	,99	34,79
i	24	l	26	32,87		1	13,77	,68	45,96	,68	,99	38,27
	26	l	23	26,43		4	19,79	,85	45,37	,69	,98	37,66
Į.	27		21	9,34		6	34,94	,90	43,38	,69	,98	35,67
1	29	1	15	15,39		12	<b>30,7</b> 0	,92	45,17	,71	,98	37,44

Taking the means, which it will be observed are the mean values for the commencement of the respective years, and employing the annual variation, (-0",46) we have determined altogether as follows—

	Mean	Ob	liquity	January	1,	183	35.
•				<b>W</b> i			
No. obs.	0	,	•	No. obs.	0	-	•
In the year 1831 from 33	23	27	38,57	<b>36</b>	23	27	37,14
1832 33			42,21	40			37,82
<b>——</b> — 1833 — 33			40,37	47			38,15
<b>—————————————————————————————————————</b>			41,67	22			37,00
<del></del>			40.58	30			36,56
<b>——</b> 1836 <b>——</b> 34			40,96	34			37,41
1837 37			41,70	18			39,09
Mean =	23	27	40,87	=	23	27	37,57

Whence, The Mean Obliquity Jan. 1st 1835 = 23° 27′ 39",22

Observations of the Sun made near to the Vernal Equinoxes of 1836 and 1837 applied to the determination of the error of the assumed Equinoctial Point.

183	6.	Observed N. P. D.	Cor.	N. P. D. corrected for 3's Latitude.	Computed A. R.	Observed A. R.	Error of Eq. Point.	REMARKS.
		9 / //	1"	1	h. m. s.	m. s*	1 *	
Feb.	12	103 58 37,19	-0,18	103 58 37,01	21 40 1,85	40 1,54	0.31	
		103 38 41,35		103 38 41,07	43 58,25	43 57,52	0,73	
	14	103 18 37,35		103 18 36,99	47 52,83	47 52,40	-0.43	
		102 58 14,93	0,42	102 58 14,51	51 47,71	51 47,18	0,53	
		102 37 42,53	0,45	102 37 42,08	55 41,53	55 41,20	-0.33	
	17	102 16 58,93		102 16 58,47	59 34,10	59 34,09	-0 01	
	18		0,44		22 3 26.65	3 26,24	-0.41	
	19		0,39	101 34 54,85	7 17,76	1 ,	-0.13	
	20		0.31		11 8,35	11 8,67	+0.32	
	21	100 52 5,56	-0,21	100 52 5,35	14 59,08	14 58,47	-0,61	
	24	99 46 39,58	1+0.16	99 46 39,74	26 25,58	26 25,28	-0,30	
	25	99 24 34,42	0,27		30 12,85	30 12,42	-0.43	
	26	99 2 16,49	0,39	99 2 16,88	34 0,28	33 59,81	0,47	}
	27	98 39 58,42	0.50	98 39 58,92	37 45.80	37 46,16	+0.36	
	28	98 17 25,31	0,57	98 17 25,88	41 32,00	41 32,06	+0,06	
	29	97 54 48,64	0,63		45 17,06		+0,16	
Mar.	1	97 32 3,40	0.65	97 32 4,05	49 1,88	49 2,15	+0.27	
,	2 3	97 9 12,18	0,66	97 9 12,84	52 46.11	52 46,02	-0,09	
		96 46 16,18	0,64	96 46 16.82	56 29,65	56 29,69	+0.04	
	4	96 23 10.62	0,59	96 23 11,21	23 0 13,36		0,35	
	6	99 0 5,74	0,50	96 0 6,24	3 55,67		0,00	
	7	95 36 55,59	0,40	95 36 55,99	7 37.54	7 37,60	+0,06	
	8	95 13 40.00	0.31	95 13 40,31	11 19,27	11 20,16	+0,89	
	9	94 50 15,41	0,18	94 50 15,59	15 1,33	15 1,91	+0,58	
	10	94 26 52,79	+0.06	94 26 52,86	18 42,11	18 42,62	+0.51	
	11	94 3 21,03	-0,05	94 3 20,98	22 23,45	22 23,56	+0,11	
	12	93 39 49,34	0,16	93 39 49,18	26 3,89	26 3,86	0,03	
	13	93 16 12,32	0,23	93 16 12,09	29 44,59	29 44,36	_0,23	
	14	92 52 38,95 92 28 57,96	0.30	92 52 38,65	33 24.00	33 24,33	+0.33	
	16	91 41 35,63	0.33		37 4.03	37 4.56	+0,53	
	17	91 41 53,03	0,33		44 22,58	44 22,73	+0.15	
	18	90 54 12,09	0,28	91 17 52,81	48 1,81	48 1,66	_0,15	
	19	90 30 31,33	0,22		51 40,37	51 40,74	+0.37	
	20		-0,13	90 30 31,20	55 18,71	55 19,27	+0.56	
	22	90 6 46,88 89 19 26,96	+0,03	90 6 46,91	58 57,50	58 57.11	-0,39	
	23	88 55 45.58	0,23		0 6 13,74	6 14,33	+0,59	
	24		0,36	88 55 45,94	9 52,22	9 52.53	+0,31	
	25	88 32 7,26 88 8 31,58	0,47	88 32 7,73 88 8 32,15	13 30,47	13 30,13	-0,34	
	26	87 44 59,28	0,57		17 8,59	17 8,63	+0,04	
	28	86 58 5,42	0,66			20 46,20		
	29	86 34 41,78	0,76		28 2.10	28 2,61	+0,51	
	30	86 11 24,35	0,76	86 34 42,54 86 11 25,09	31 40.22	31 40,04	-0,18	
	31	85 48 14,09	0,74		35 18.06	35 18,07	+0.01	
April	1		0,70	85 48 14,79	38 55,50	38 56,02	+0.52	
u hi n	2	85 25 2,72 85 1 56,19	0.62	85 25 3,34	42 33,93	42 34,32	+0,39	
	3		0,53	85 1 56,72	46 12,50	46 12,53	+0.03	
	5	84 39 1,80 83 53 13,11	0,42	84 39 2,24	49 50,08	49 50,93	+0,85	
	6		1+0.19	83 53 13,30	57 8,48	57 7.57	-0.91	
		83 30 30,82	+0.07	83 30 30.89	1 0 47 51	0 47.01	-0,50	
	71	83 7 57.50	-0,04	83 7 57,46	4 26,38	4 25,77	-0,61	i

1836	j.	Observed N. P. D.	Cor.	N P D. corrected for ⊙'s Latitude.	Computed A. R.	Observed A. R.	Error of Eq. Point.	Remarks.
April	8	82 45 27,54	-0,13	82 45 27,41	h m. s. 1 8 6,03	m. s. " 8 5.59	-0,44	
	9 10	82 23 8,94 82 0 55,77	0,19	82 23 8,7 <i>5</i> 82 0 <i>55,5</i> 3	11 45,27 15 25,13	11 45,03 15 24,87	-0,24  -0,26	! !
İ	11	82 0 55,77 81 38 51,77	0,24		19 5,07	19 5,31	+0.24	1
İ	12	81 16 55,56	0,25		22 45,40	22 45.55	+0.15	
ļ	13	80 55 9,64	0,21		26 26,41	26 26,35	-0.06	1
1	15	80 12 2,37	-0,06		33 47,83	33 49,10	+*1,27	obsd. by V.
1	16	79 50 41.31	+0,04		37 29,73		+0,75	A. į
1	17	79 29 27,63	0,17		41 12,47	41 13,38	+ 0,91	B.
1	18  19	79 8 24,31 78 47 32,44			44 55,60 48 39,00	44 55,39	$\begin{bmatrix} -0.21 \\ -0.48 \end{bmatrix}$	i
183		10 41 02,44	0,40	70 47 02,04	40 00,00	40 00,02	-0,40	1
Feb.	13		+0,06	103 23 19,65	21 46 58,27	46 57,52	-0,75	1
	14	103 3 1,25	0,17	103 3 1,42	50 53,07	50 52,04	-1,03	Į į
1		102 42 33,40			54 46,58	54 45,65		
1		102 21 56,40		102 21 56,74	58 38,66	58 39,21	+0,55	1
1	17 18	102 1 2,63 101 39 58,03			22 2 31,12 6 22,74		+0,77	l
1	19				10 13,45			İ
i	20				14 4,12			
1	21	100 35 41,40			17 53,19			İ
ì	26		-0,20	98 45 19,36	36 52,06			I
1	27	98 22 50,37			36 38,07	40 37,34	,	
1	28						, ,	1
Mar.	1 9	97 37 33,63 97 14 44,47			48 7,92 52 52,19			1
1	2 3	96 51 51,38			55 35,60			
- 1	4	96 28 46,86			59 19,33			
1	5	96 5 39,77	0,5	7 96 5 39,20	23 3 2,40			ļ
1	6 7	95 42 26,66			6 45,06			i
1	7	95 19 11.23			10 26,93			
1	8 9	94 55 52,6 94 32 23 3			14 8,20 17 50,26			
1	10				21 31,20			
1	ii		+0,0					
1	12	93 21 42,7	5 0.1	3 93 21 42,88	25 53,18	3   28 52,29	0,89	
i	13							
	17							
1	23 24							
i	25				12 36,03			. 3
1	27				23 31,51			
1	28	87 3 45,3	1 0,3	8 87 3 44,93	27 9,5	1 27 8.95		<b>;</b>
1	29	86 40 21.8	1 0,4	3   86 40 21,38	30 47,47	7 30 46,71	<b> </b> 0,76	; <u> </u>
1	30							
A	3 1						1 -0.11	
Apri		85 30 33,7 85 7 33.4						
Į	:	84 44 34,5						
1		83 13 21,0						
1	1	82 50 49.4	9 0.2	2 82 50 49,71	7 13,3	<b>8   7</b> 13,40	0,09	
		9 82 28 26.3	1   0,3	4 82 28 26,64	10 52.9	9 10 52,96	6   -0.03	31

Omitted in taking the Mean.

1837.	Obser N. P.		Cor.	cor	recu	D. ed for titude.	omp A.	outed R.	Observed A. R.	Error of Eq. Point.	REMARKS.
April. 11 12 13 14 15 17	81 22 81 0 80 38 80 17 79 34	6,05 17,62 38,25	0,62 0,63 0,61 0,50	81 80 80 79	38 17 34		18 21 25 29 32	\$. 12,58 53,01 33,35 15,97 55,59 18,61 2,07	m. s. * 18 12,83 21 52,92 25 33,83 29 15,06 32 55,94 40 19,31 44 2,02	+0.25 -0,09 +0,48 -0,91 +0,35 +0,70 -0,05	

Observations of the Sun made near to the Autumnal Equinoxes of 1836 and 1837 applied to the determination of the error of the Equinoctial Point.

1836.	Observed N. P. D.	Cor.	N. P. D. corrected for O's Latiude.	Computed A. R.	Observed A. R.	Error of Eq. Point,	Remarks.
Sep.	9 84 41 43,17	+0,53	84 41 43,70	h m. s.	m. s. 7	_0,79	
1			85 27 15,39	17 46,81	17 46,79	-0.79	
1		0,31	85 50 11,60	21 22,82	21 22,28	-0.54	
1	6 87 22 31,57	-0.18	87 22 31,39	35 45,01	35 44,70	-0,31	
2		-0,53	88 55 36,16	50 6,27	50 6,42	+0,15	
2		0,56	89 18 58,98	53 41,93	53 42,03	+0,10	
2		0,57		<i>5</i> 7 17,81	57 17,44	-0,37	
2	_1		90 52 32.13	12 8 4,39	8 4,59	+0,20	
2			91 16 2,05	11 41,13		-0,14	
2			92 26 12,24	22 30,37	22 30,75	+0.38	
	4 94 22 40,39 6 95 9 0.74			40 38.39	40 38,40	+0,01	
	_1	0,43	95 9 1,17	47 56,48	47 56,08	-0,40	
	8 95 55 2,68 9 96 17 <b>54</b> ,45	0,31	95 55 2,99	55 15,79	55 15,20	-0.59	
1		0,22	96 17 54,67 96 40 45,14	58 55.67 13 2 36,62	58 55,83 2 36,57	+0,16	
l i		-0.01	97 3 23,17	13 2 36,62 6 16,89	2 36,57 6 17,78	-0.05 + 0.89	
l i		0,14	97 26 2,48	9 58,79	9 59,67	+0,88	
i				13 41,29	13 41,89	+0,60	
i i		0.38	98 10 59.10	17 23,59	17 23,97	+0,38	
1	8 99 39 33,70		99 39 33,04		32 20,80	-0,14	
1	9 100 1 19,10		100 1 18.43	36 631	36 6,33	+0.02	
2			100 23 0,22	39 53,11	39 52,70	-0.41	
2			100 44 24,78	43 39,20	43 39,34	+0,14	
2			101 5 43.64	47 26,63	47 27.01	+0.38	
2	5 102 8 38,39	0,21	102 8 38,18	58 52,98	58 53,74	+0,76	
1837	0 04 00 11 10	1				i l	
Sep.	9 84 36 11,18	-0,30	84 36 10,88		9 43,18	+ 0,38	
li	1		85 44 40,17	20 30,93	20 30,11	-0.82	
li		0,24	86 7 31,87	24 5,57	24 5,72	+0,15	
i				27 41,45	27 41,20	-0,25	
li			87 16 48,88	31 16,29 34 51,99	31 16,69	+0.40	
i	7 87 39 55,75		87 39 55,92	38 26,56	34 51.78 38 27.60	-0,21	
	8 88 3 11,53		88 3 11,81	42 2,07	42 2,70	+1,04 +0.63	
	9 88 26 31.04	0.39	88 26 31,43	45 37,78	45 37,76	-0.02	
	0 88 49 51,21		88 49 51,71	49 13,30	49 13,46	+0.16	

183	7.	Ohser N. P.		Cor.	N. P. correct O's La	ed for		mpi A. I	uted R.		erved R.	Error of Eq. Point.	Remarks.
1		۵ /	*	7			h. 11	n.	S.	192	s. "	*	
Sep.	21	<b>89</b> 13	14,71	+0,57	89 13		11	52	49,11	52	48,59	-0.52	
1	22	89 36	39,94	0,63	89 36	40,57		56	25,10	56	24,38	0,72	
1	23	90 0	2,65	0,66	90 0	3,31	12	0	0,69	0	0,02	-0,67	
1	24	90 23	29,99	0,66	90 23	30,65		3	36,68	3	35,65	-1,03	
j	25	90 46	51,60	0,64	90 46	52,24		7	12,02	7	12,08	+0.06	
ł	26	91 10	17,76	0,59	91 10	18,35		10	48,24	10	48,25	+0,01	
1	27	91 33	41,44	0,51	91 33	41,95	1	14	24,28	14	24,73	+0,45	
i	28	91 57	11,49	0,42	91 57	11,91	1	18	2,09	18	1,04	-1,05	
Oct.	10	96 35	18,17	-0,39	96 35	17,78	13	1	43,67	1	43,52	-0,15	
İ	12	97 20	41,73	0,22	97 20	41,51		9	6,19	9	6,76	+0,57	
l	13	97 43	5,97	0,11	97 43	5,86	1		46,76	12	47,81	+1,05	
l	14			0,00	98 5	34,99			29,71	16	30,42	+0,71	
l	16	98 50		+0.23	98 50	4,35			55,86	23	56,83	+0,97	

Taking the means and refering to former Vols. we have determined altogether as follows—

#### ERROR OF THE ASSUMED EQUINOCTIAL POINT.

Observations	in Spring.	Observatians in Autumn.	
	8		8
from 19 observations in 1831	+0.055	from 17 observations in 1831	+0,267
	,140	<u> </u>	,399
<del></del>	,046	29 1833	,325
—— 56 —— —— 1835	+ ,392	29	,376
59 1836	+ ,003	<u> 25</u>	,052
<del></del>	- ,001	23 1837	,050

In Vol. III, I had proposed to reject the result derived from the Spring Observations of 1835; but the results from the Autumnal Observations of 1836 and 1837, when compared with former results, exhibiting a similarly large discordance, it would appear preferable to retain it; accordingly we have

\*Error of the assumed Equinoctial Point.\*

.. MEAN ERROR OF THE ASSUMED EQUINOCTIAL POINT +0,144

The results here obtained from the Observations at the Vernal and Autumnal Equinoxes, as well as those arrived at for the Obliquity, at page 69, exhibit a discordance, such as would be explained by attributing an error to the assumed place of the pole (the Latitude in fact); to understand this matter clearly, it is necessary to recollect, that every measure of North Polar Distance which is contained in this andthe previous volumes of the Madras Results, has been derived from the Greenwich Catalogue of 720 Stars for 1825; which catalogue reckoned the N. P. D. from a point (supposed to be the pole) situated at an altitude of 51° 28' 38",5 above the north horizon of the Greenwich Royal Ob-

servatory; hence, the error (if any) of this assumption, necessarily affects by its whole amount, the N. P. D. of every Star of the above catalogue, and consequently each and every measure of N. P. D. which has been made at Madras: thus, to render the Solsticial Observations at Madras accordant, we must diminish the Latitude of Greenwich 1",65; and to reconcile the Observations at the Equinoxes, we must diminish the Latitude 0",66,—rendering it exceedingly probable, that the Latitude of Greenwich as above stated, must be diminished by about one second.\*

#### OBSERVATION OF SPOTS UPON THE SUN'S DISC.

The following observations of the various spots which have from time to time passed over the Sun's disc—have been made at the time of Transit with the Meridianal Instruments, so as not to prevent the ordinary observation of the Limb; at the Transit, one or two wires have mostly been taken; and at the Mural Circle, only two Microscopes could be read off; they are however on the whole, I apprehend—little inferior to the other observations.

Apparent Right Ascension and Declination of Spots observed upon the Sun's Disc, together with their Geocentric and Heliocentric Places.

Ma	dras	M.	т.	A	pare	ent	A. R.		opar Decn	ent	Lor		eocen ide.		itude.	Lor			entric   Lat	itud	e.
1835	D.	h	774.		h.	776 .	8.		,	4	0	7	*	1 '	"	1 0	7	*	1 0	7	•
Dec.	23	23	59,5	(1)	18	8	8.25	23	22	8,5	271	<b>52</b>	3,3	+4	46,6	76	17	31	+17	5	13
	25	0		(1)		12	19,41	23	20	32,8	272	49	42,6	+5	21,1	90	41	45	18	55	
	26	0	0,5	(1)		16	29.93	23	18	39,0	273	47	15,0	+5	49,2	105	28	40			
	27	0	1,0	(1)		20	41,78	23	16	18,5	274	45	7,7	+6	16,7	119	27	38		45	
	29	0	2,0	$\{(1)$		29	10,78	23	10	50,9	276	42	11,3	+6	40,8	149	16	33		18	
	30	0	2,5	(1)	i	33	28,37	23	7	34,2	277	41	29,3	+6	44,3	163	52	17		32	
1836	3		-					1			1			l		l			1		
Jan.	4	0	4,9				39,23		41	52,0	282	49	1,5	8	48.0	157	8	8	-25	37	28
ı	8	0	6,7	(5)	19	13	31,72			<b>43,1</b>					6,9			0	-22		
	20	0	11,1		20		12,24	20	13	20,5	299	10	37,1	+7	20,6	175	23	23	+ 26		
	21	0	11,4	L		9	16,36	20	0	14,7	300	- 9	24,2	+8	7,2	170	58	33	+30		10
	23	0	12,0	(1)	)	18	10,58	19	33	55,3	302	17	47,2	+6	14,3	140	3	54	+22	38	37

<sup>\*</sup> In Vol. II. page 84, I had arrived at very nearly the same result,—a result which has lately been completely verified by the observations at Greenwich.

Ma	dras	м.	Т.	A	par	ent	A. R.		par			(	Geocer	tric			F	lelio	centric	;	
2.54				,				'	Dec	n.	Lo	ngin	ude.	Lat	itude.	Lor	giti	ıde.	Lat	itud	e.
1836	D.	ħ.	m.		h.	m.	<b>s</b> .	0	,	4	0	7	7		1 11	0	′	77	0	,-	"
Jan.	26	0	12,7	(1)	20	30	10,22	18	52	56,0	305	12	32,2		17,2	184			+22	51	18
	31	0	13,7	(2)			57,69	17	39	49,4	310	31	15,8	-2	54,0	125	44	24	<u>—10</u>	19	10
Feb.	1	0	13,8	(2)		55	49,54	17	24	47,5	311	28	32,2	3	35,3	139	56	58	12	_	41
	2	0	13,9	(2)		59	40,58	j 17	8	48,3	312	25	57,2	3	36,5	153	51	56	1-12	52	58
	3	0	14,0	(2)	21	3	32,39	16	<b>52</b>	33,5	313	23	42,6	3	47,5	168	0	17	<u> 13</u>	32	94
	4	0	14,2	(2)		7	24,72	16	35	53,6	314	21	46,2	3	48,5	182	6	38	-13	36	<b>5</b> 8
	5	0	14,3	(2)		11	19,86	16	18	54,9	315	20	39,0	4	5,l	195	37	59	-14	37	37
	8	0	14,5	(5)		23	19,76	15	25	44,2	318	21	44,5	5	39,2	213	59	0	-20	28	49
	9	0	14,5	(5)		27	17,16	15	6	48,9	319	22	2,3	5	28,0	223	1	41	-19	47	2
	15		14,5	` ′		51	29,27	13	1	51,8	325	35	38,0	1	53,7	165	2	42	<b>-</b> 6	44	15
	16	0	14,4	(3)		55	57,15	12	41	33,2	326	43	56,5	4	56,1	137	<b>54</b>	9	j—17	48	18
	17	0	14.4	(3)		59	36,70	12	21	48,2	327	41	2,8	4	45,l	151	39	21	1-17	7	44
	18	0	14,3		22	3	16,50	12	1	59,5		38	17,4	4	45,6	164	56	46	17	9	25
	19		14,2	(3)			56,16	11	42	3,1		35	23,7	5	25,1	179	51	22	j—19	37	52
	20	_	14,1	(3)			37,05	11	21	51,7	330	33	22,0	5	18,8	192	40	54	-19	14	26
	24		13,6	(2)			15,96	9	46	9,4	334		50.7	4	4,2	105	28	26	-14	37	59
	26		13,3	ı ` _ '			28,53	9	3	3,8	336	51	54,1	3	18,6	133	8	39	i - 11	51	51
	27		13,2	(2)		38	2,19	8	41	37,9			51,9	3	2,6	146	38	47	-10	53	41
	29		12,8	(4)		-	40,84	7	57	10.5			42,5	4	24,1	143	46	50	i—15	53	30
Mar.			12,6	(4)			13,23	7	35	29,9	340		_'_		14.5	156	14	21	-15	17	14
u	3		12,2	(4)			16,06	6	52	19,0			2,4	4	17,1	183	13	53	i—15	27	16
	7	-	11,2	()	23		53,40	5	19				12,7		26,0	198	7	27	<b>-</b> 8	42	45
	8		11,0	(3	-0		24,77	4	57	13,3	347		10,8	t .	51,2	213	13	35	<b>i</b> —10	14	21
	10	ŏ	10,5	( )			34,14	4	8	2,7	349		53,8	• •	•	225	ī		+ 1	49	-8
	31	ŏ	4,3	(6)			38,70	4	14	6,5		46	11,2	2	3,6	148	5	47	7	22	-
Apri		ŏ	3,0	(6)		43	5,09	4	36	8,8	lii	42	9,3	l-ī	55,9	163	_	_	- 6	57	12
Apri	2	Ö	3,6			-	31,01	4	56	46,8	1 12	37	48.8	<b>—</b> 2	3,7	177		57	<b>-</b> 7	23	40
	3	ŏ	3,3	(6)			54,35	_	19	14,7	iã		49,2		<b>59</b> ,3	193	-		I- 7	11	11
	4	ŏ	3,0	رما			42,99	5		30,7		33	31,0		28,2	188	-	50	<u> </u> _16	17	49
	5	ŏ	2,7	l		-	14.08	6	ŦV	38,0	15	-	5.7		17,0	193		55	-19	22	0
	7	ŏ	2,2	(9)	1	-	55.17		55	46,1	17	22	52,6		24,4	219		56	+23		32
	8	Ö	1,9	(8)	•	_	10,21		13		18	-	24,2		23,2	256		58	+16	0	6
	9	Ö					54,29	7	27	24,8		11	3.2		56.7	279		57	-14	21	35
	14	0	1,6 0,3	(6)			51,91	ĺ ģ		35,2		20	3.7	+0	1,8	204		5	+ 0	6	79
	15	0	0,0	Ì			22,89	9	58	40.0	25	30			49,0	151	5	47	1	24	49
			58.7		2	3	1,36	+12	34	, -		59	26,3		10,0	242	_	58	+11		56
	30		56,9	(B)	~		50,58	15	3		1	52	35.8	I -	22,1	219	49	55	- 8	36	30
M				(6)			25,94	15	-	4,4		49	•	•	31,7	227	8	48		53	12
_ ,			56,8	(8)	12	12	14,74	_ i	15	57,0			43,5			333	-	44	+12	23	23
Sep.			51,3	(7)	. 2		•	· 2	0	39,0	185		10.0		56,7		ĩi	0	+ 10	38	57
			50,7	(7)			27,35	2	22	36,3	186	5	50,1	+3	4.7		43	30	1+11	7	57
			50,3	$\binom{7}{3}$			28,06					1	42,3		53.7		7	24	1+10		12
<b>.</b> .			50,0	(7)	12		53,17	$\frac{2}{7}$	45	13,5	187	_			36,2	346		8	+20		12
Oct.				(A)	13		38,49	7	21	1,1	199	6	0,2	ITO	00,2		53	-	1 '		7
	13	23	46,1	l		17	44,67	8	4	6,7	200	99	1,9	110	20,4	111	00	00	+31	-44	7

The numbers (1), (2), &c. are supplied—to shew when the same spot has been re-observed: If we compare the cases in which the same spot has been re-observed after a complete revolution, we determine approximately.

rom No.	1, that the	Sun 10	tateș on	his ax	is at the	rate of	140	2′	in 24	bonrs.
	2, —						14	6		
	6, —						13	48		
	9. —		-				14	41		

The observation on the 30th April, shews that the position of the spot had shifted 6 or 7 degrees (apparently 1' 50"), or that another spot had sprung up in its neighbourhood; and the observation of No. 1 on the 29th of December and 23rd January, shews a variation of 2 degrees in the Heliocentric Latitude: the observation of No. 9, which embracing 7 revolutions, should be a good one,—seems to confirm 1 and 2 in giving a rate of rotation of 14° 4' a day; or it would appear, that the Sun makes one complete sidereal revolution on his axis in 25 days 14 hours. With regard to the position of the Solar Axis, the above observations are sufficient only to furnish a rude approximation: it would appear that the inclination of the Solar Axis to the Pole of the Ecliptic is between 6 and 7 degrees; and that the Heliocentric Longitude of the intersection of the Solar Equator with the Plane of the Ecliptic is about 95°.

Observed Right Ascension and North Polar Distance of Mercury, compared with the places interpolated from the Nautical Almanac.

18:	36.	Madras. Time of Observation.	A. R. from Observatioon.	A. R. from N. A.	Error of N. A.	N. P. D. from Observation.	N. P. D. from N. A.	Error of N. A.	Remarks.
Jan.	16		h. m. s. 20 17 25,55	24,95	_0,60	0 / "	0 "	-	
	19 21	0 47 45,8 53 52,8	20 38 42,64 20 52 43,47	42,34 43,11	-0,30 $-0,36$	110 33 15,93 109 33 26,60	33 8,44 33 17,43	-7,49 $-9,17$	faint.
	22	56 51,2	59 38,76	38,92	+0,16	1109 0 58,46	1 3,30	+4,84	
	23	59 <b>46,</b> 1	21 6 30,87	30,92	+0.05	108 27 22,78	27 23,91	+1,13	
	26	1 8 0,9	26 36,64	36,68	+0,04	106 38 29,92	38 29,62	-0,30	
	27	10 33,1	21 33 6,08	5,68	0,40	105 59 53,09	59 50,46	-2,63	
	29	15 12,3	45 37,90	37,54	0,36	104 39 48,95	39 48,64	-0,31	
Feb.	2	22 2,0	22 8 15,89	15,45	0,44	101 53 47,26	53 46,75	-0,51	
	3	23 3,4	13 14,11	13,80	-0,31	101 12 34,70	12 31,82	-2,88	
	4	23 44,1	17 51,54	51,41	-0,13	100 32 3,79	32 0,13	-3,66	
	5	24 2,1	22 6,29	5,77	-0,52	99 52 41,58	52 33,93	<b>-7,65</b>	
	6	23 54,0	25 54,92	54,59	-0,33	99 14 39,06	14 38,77	-0,29	1
	8 9	22 12,1 20 33,2	32 5,70 34 23,30	5,23 22,46	_0,47 _0,84	98 4 53,09 97 33 59,29	4 54,61	+1,52 -0,01	1
	10	18 18,9	34 23,30 36 5,58		-0,61	97 6 16,34	33 59,28 6 16,00	<b>-0,01</b> <b>-0,34</b>	
April	13		0 30 33,76	33,83	+0,07	89 10 43,41	10 51,63	+8,22	1
apın	14		0 36 59,40	, ,	-0.35	03 10 40,41	10 01,00	1 0,22	
	18	14 14,9	1 3 42,17		_0,28	85 14 16,18	14 22,09	+5,91	ł
	22	26 52,9	32 8,57	8,65	+0,08	81 52 3,19	52 4,70	+1,51	ł
	24	34 4,8	47 4,50		+0,15	80 8 17,06		-3,88	ļ.
	25	37 36,2	54 43,84		_0,01				ì
May	31	1 38 53,7	6 14 20,44		-0,13	64 53 2,75	53 1,61	-1,14	I

<sup>•</sup> In case these spots are not situated upon the illuminated resface of the Sun, some part of the discrepancy here found may be explained; but the observation of the Solar spots, are, by reason of their varied figure—so subject to inaccuracy, that nothing conclusive with regard to their situation or movements, can be expected from the above few observations.

### PLANETARY OBSERVATIONS.

183		1	(ime	Mean e of ation.	O	fro ser	R. om vation.	A. R. from N. A.	Error of N. A.	١.	fro	D. m vation.	1	P. D. from	Error of N. A.	Remarks.
July .	19		m. 39	s. 39,7		78. 31	<b>s.</b> 45,13	45,09	-0,04	68	47	2,94	47	7,34	+4,40	
Oct.	6			29,4			30,79	30,65	0.14	٠. <u>.</u>		-,0.	1 -			
Nov.				34,1	15		28,70	28,36	-0,34	106	10	48 47	10	53,30	+4,83	
1101.				16,4		24	0,09	59,94	-0.15						+3,65	
Dag	4			30,1	13		46,49					12,85		55,13		i .
Dec.			2J	30,1		21	40,43	46,01	<b>-0,4</b> 8	***	32	12,00	132	13,01	+0,16	
183		^	<b>50</b>	57.0		42	49,04	40.01	-0.13	1112	00	46,37	00	40.00	1061	
Jan.	3	. 0		57,2			•	48,91	-,	•				48,98	+2,61	
	7	ı		49,2	20		29,49	29,35	-0,14	112		31,31		30,45	-0,86	
	8			36,8			14,01	14,22	+0,21			24,05		26,14	+2,09	
	9			18,5			52,57	52,29	-0.28			55 6 l		56,14	+0,53	
	10			53,0		31	24,32	23,99	<b>—0,3</b> 3				44	5,02	+0,11	
	24			29,0			13,50	12,82	-0,68	103	25	22,54	25	20,50	-2.04	) invisibleto
Feb.		22		21,1.	20		<b>5,</b> 09	4,27	-0,82	-			-	j		the Circle
	20		35	6,7		38	47,81	47,24	<b>—0,57</b>			14,05	1	18,11	<b>+4,06</b>	observer.
Mar.	1		28	11,6	21	7	20,03	19,78	-0,25	106	52	16,56	52	18,07	+1,51	Ouserver.
	5		30	16,7		25	12,03	11,12	0,91	106	9	41,18		48,84	+7,66	
	6		31	6,9		29	59,02	58,73	-0,29	105				38,74	+4,12	
	7		32	5,5			53,34	53,08	-0.26			1,87	40	5,19	+3,32	
	8		33	8,8			54,01	53,62	-0,39	105	23	5,94	23	8,58	+2,64	
	9			19,0		45	0,38	0,10	-0,28	105		47,76		49,95	+2,19	
	10		35	33,3			12,39	11,70	-0,69	104		7,91		10,10	+2,19	
	13			47,2	22	6	16,13	15,80	-0.33	103		0,91	38	8,71	+7,80	
	16			39,2	22		58,39		-0.03			16,47	1			
	22							58,36				21,77		19,42	+2,95	i i
	23		56	0,1	40		59,51	59,29	-0,22					26,26	+4,49	
			58	3,8	23	4	1,64	1,29	-0.35	98	30	<i>5</i> 9,89	31	8,69	+8,80	
	24	23		12,5		10	6,59	6,65	+0.06		~-		1 ~ -		1000	i
	26			41,6			28,21	27,66	-0,55		35	3,11	35	6,14	+3,03	1
	27			57,3			42,92	43,39	+0,47		<b>54</b>	2,12	54	4,68	+2,56	]
	28			19,9		35	2,34	2,50	+0,16			56,44		54,40	-2,04	
	29		11	47,6	1	41	25,93	25,69	-0,24	94	28	40,79	j 28	36,44	<b>4</b> ,35	
	30		14	16,6		47	52,60	52,58	0,02	93	42	7,86	44	11,98	+4,12	
A pril	19	0	16	43,8	2		24.23	24,26	+0,03	i –			-			
•	20		20	46,6		13	24,54	24 32	-0,22	76	19	5,37	19	5,60	+0,23	
	21			51,2			26,19	26,18	-0,01			59,47	26	55,29	-4,18	}
	25		41	6,4			30,57	30,67	+0,10			54,94		53.15	-1,79	1
	26		43	3,8	3		25,05	24,71	-0.34		29	1,52	29	3,08	+1,56	}
	30			51,0	Ŭ	32	1,78	2 11	+0,33			13,28		11,70	-1,58	
May	2	1	6	23,8			27,64	27,70	+0,06			34,49		32,82	-1,67	
ay	3	•		22,5			23,70	23,84	+0.14			34,07		30,03	-4,04	
	11			55,9	A	40	32,16	32,38	+0.14			46,01		44,34	<b>—1,67</b>	
T .1	12			41,1			14,94	15,03	+0,09	00	11	29,12	1 * *	26,54	<b>—2,58</b>	
July				114			54,24	54,86	+0.62	-	10	10.45	1,5	11	±1.20	
				26,4		10	3,54	4,12	+0,58	1		10,45		11,77	+1,32	
		23		7,0	7		25,62	25,38	-0,24	66	49	6,65	49	7,74	+1,09	<u> </u>
		23	25	0,3	7	16	19,23	1972	+0,49	i -			-			7 invisibleto
Aug.	7			38,3		<b>4</b> 9	5,48	6,04	+0,56	-			-			the Circle
-	9		53	1,4	10		22,51	22,81	+0,30			28,78		32,40	+3,62	observer.
	28			33,4	11		54,96	54,87	-0.09	90	6	48,28	6	34,25	-4,03	OUBELVEL.
Sep.	13			37,0		57	3,46	3,34	-0.12	- ا			-	[		
	20	l	15	7,2		11	7,39	7,04	<b>—</b> 0,35	101	30	15,89	30	18,03	+2,14	l i
	21		12	3,8	ا آ		59.81	59.52	0,29			19,31		21,41	+2,10	
	22			39,8	l		31,71	31,26	-0.45			19,56			+3 42	l i
											45	19.00	145	22,98	+042	

#### PLANETARY OBSERVATIONS.

Observed Right Ascension and North Polar Distance of VENUS, compared with the places interpolated from the Nautical Almanac.

				<i>p</i>	races	าก	ierpoie	itea fr	om the	Naut	tical Al	manac.		
		Mad	ras	Mean	1	A.	R.	A. R.	Error	N.	P. D.	N.P.D.	Error	
183	6.	Т	'ime	of	1	fro	m	from	of		ີ ແດກ	from	of	REMARKS.
		Obs	erv	ation.	Obs	erve	tion.	N. A.	N. A.	Obse	ervation.	N. A.	N. A.	
		h		s.		m.	8.	1	, -	0	" "	1 7	<u> </u>	<del>i                                     </del>
Jan.	4	1		36,9			33,75	33,38	0.37		29 18,27	14,20	- 4,07	l
	7			12,6	j		59,41				33 17,28		- 4,84	
	8			22,0	١.,	53	•	5,48			13 27,65		<b>-</b> 3,65	
	16			47,2		33					16 23,19		-1.66	
	19			34,6	į		42,64			105	2 25,68		<b>- 7,93</b>	l
	20			27,6	İ		32,27	32,39	+0,12	4	36 51,04		<b>—</b> 3,86	
	21			20,0	00		21,48	21,01		104	10 51,89		+ 1,37	
	22		59		22			8,38			44 34,62		+ 1,89	
	23	^		59,7			54,39	54.51			17 59,75		-1,65	1
•	25	2	1	35,1			23,00	23,06			23 40,78		- 1,28	}
	26			20,9		21	5,49	5,60	+0,11	101			-1,31	l
	28			49,4			27,20	26,86	0,34		59 49,49		<b>- 1,45</b>	
Pal-	29			31,5	İ		6,25	5,86			31 19,69		- 3,66	ļ
Feb.	2			10,3			32,57		0,18		34 33.01		+ 1,72	Į
				48,2	00	58	6,26			98	4 48,52		+ 1,38	
	<b>4</b> 5			25,0	23		39,89		0,11		34 51,72		+ 1,19	
	6		9	0,5			12,25		- 0,09	97	4 45,74		1,61	l
	8			35,5			43,88		-0,16		34 26,82		- 2,10	
	9			43,1			24,61		+0,02		33 21,26		4,51	!
July	31	23		15,9	7		14,25		_0,22	95	2 37,72	30,44	<b>7,28</b>	ļ
	9	21	20	5,7	,		34,83	35,17		74	40 04 60	10.00	11.54	ł
Sep.	12	21		27,8			15,69 14,47		-0,04		48 24,60		-11,54	1
	20	QΛ		36,4 33,9			44,39		+0,36		56 36,90 38 44,87		10,17	į
Oct.	3			50,7			16,22		-0,18			1 '	<b>- 8,13</b>	ļ
Nov.	25			40,0		30			-0,06		52 44,79		2,64	l
Dec.	1	21		12,8	10		17,26		-0,44 $-0,58$		13 36,36 44 53,99		0,80	l
Dec.	5			51,8	14		44,15	43,60			22 49,65		1,25	•
	6			33,7			23,38	22,87			46 48,75		+ 0,60 + 1,46	<b>!</b>
	19			29,1			36,33		-0.37		33 37,93		+ 0,10	i
1837			~.	23,1	0	~~	00,00	00,30		1 .00	00,00	00,00	7 0,10	İ
Jan.	2	21	43	0,4	16	33	20,37	19.96	0,41	110	27 13,29	13,19	- 0,10	i I
,	19	22		59,5	18		25,93		_0,80		41 24,05		+ 6,44	1
Feb.	3	~~		24,0			2,33		-0.51		59 44,08		+ 3,63	1
	5						41,47		-0,58		42 36,87		+ 6,30	1
	6			42,4			59,78		_0,30	iii			+ 6,01	l
	7			51,8			17,64				22 55,20		+ 6,58	l
	8	22	34	13,1	19		34,46	34,30		iii		, ,	+ 6,20	!
	9			32,3		55	50,99	50.52	-0,47	iii	0 42,45	46,77	+ 4,32	ļ
	10			51,7	20	1			0,43		48 42,37		+ 0,19	1
	17			33,9		37	28,03		-0,85		7 20,18		+ 5,00	ļ
	19			56,0	İ		41,74	41,29		1 108	33 14,10	20,44	+ 6,34	1 .
	20		49	3,5	İ		46,87	46,38	-0,49		15 24,82		+ 6,12	1
	26			32,7	21		55,79	55,74			17 43,98		+ 5,04	
Mar.	1			30,1			45,51	45,35			12 37,33		+ 0,79	ļ
	5	23		16,2	ĺ		16,83	16,26			39 46,00		+ 6,31	
	7		4		22		55,58	55,36		102			+ 7,15	1
	8			55,1			43,45	43,33	-0,12		26 16,34	20,00	+ 3,66	1
					ĺ		30,73	30,37	-0,36		1 5,07		+ 2,81	ł
	9		o	44,2	1	10	000,000			106	1 0.07	1 /,00	1 201	1

1837	7.	Madras Mean Time of	A. R. from	A. R. from	Error of	N. P. D.	N. P. D. from	Error of	RRMARKS.
		Observation.	Observation.	N. A.	N. A.	Observation.	N. A.	N. A.	
		h. m. s.	h. m. s.	"	· //	1 0 / //	7	"	<del>:</del>
Mar.	13	23 8 54,4	22 35 29,07	28,80	0,27	100, 17 12,26	10,08	-2,18	į
	15	10 21,7	44 53,00	53,07		99 23 32,11		+0,23	
	16	11 10,1	49 33,56	33,41		98 56 16,86	19,42	+2,56	i
	19	13 17,8	23 3 31,62	30,95		97 33 14,68	16,66	+1,98	
	20	13 58,9	8 8,96		-0.28	97 5 11,93		0,05	
	21	14 40,0	12 46,22		-0.37	96 36 54,43		+0.13	i
	22	15 18,3	23 17 22,43		-0,54	96 8 25,93	26,53	+0,60	
	23	15 57,7	21 58,49	58,32		95 39 49,93		_1,44	
	24	16 36,9	26 33,67	33,74		95 11 4,71	0,90	-3,81	i
	26	17 54,5	23 35 43,67	43,42	-0,25	94 13 1,03	0,43	0,60	CCleak an
	27	18 29,4	40 16,82	17,29		93 43 47,49		+1,54	∫Clock er-
	28	19 6,7	44 50,68		-0,38	93 14 29,68		+2,44	for doubt-
	29	19 44,9	49 24,55	24,41	-0,14	92 45 6,70	7,28	+0,58	ful.
	30	20 20,5	53 57,48	57,73		92 15 39,89	38,37	1,52	
April	1	21 32,6	0 3 3,08	3,01		91 16 28,63		0,30	
Free	7	25 6,7	30 16,31	16,33		81 18 10,83		+0.87	
	11	27 29,3	0 48 25,72	26,05		86 19 41,45		3,71	i
	12	28 6,2	52 59,10	58,90		85 0 14,08	8,14	5,94	1
	13	28 41,6	57 32,25	32,02	0,23	85 20 49,05	43,76	_5,29	
	14	29 18,5	1 2 5,36	5,44		84 51 31,81	25,02	-6,79	
	17	31 11,8	15 48,06	48,07		83 24 10,95		_0,87	'
	19	32 29,0	24 58,45	58,48	+0,03	82 6 44,79	41,57	_3,22	
	20	33 7,6	29 34,25	34,56		81 58 16,88	10,88	6,00	
	21	33 47,8	34 10,61	11,10	+0,49	81 29 58,89	52,85	6,04	
	23	35 9,8	43 26,46	26,52	+0,06	80 33 57,34		7,02	
	24	35 50,6	48 5,07	5,16		80 6 15,85	6,35	9,50	
	25	36 34,0	52 44,27	44,43		79 38 45,66	36,83	8,83	
	26		57 24,42	24.73	+0,31	79 11 26,27	21,56	_4,71	'
	27	38 2,2	2 2 5,54	5,71		78 44 23,58	21,36	_2,22	
May	1	41 8,1	20 58,12		-0,02				
	.3	42 45,8	2 30 29,33	29,84					
June	2	0 14 32,5	4 56 40,89	40,91		67 11 28,23	24,79	-3,44	
<b>J</b> 440	5	18 37,3	5 12 36,00	36,04		66 43 15.86	14,16	-1,70	į
	6	20 1,2	17 55,78	55,85		66 35 11,23	11,11	-0,12	
	9	24 12,5	33 58,77	58,48		66 15 9,93	8,88	-1.05	
	11	27 2,9	44 42,86	42,42		66 5 16,99	16,78	-0,21	•
	12	28 28,7	50 5,02	4,88		66 1 25,45		-1,37	·
	13		55 27,5 <b>0</b>		+0,27	65 58 14,69	13,86	<b>-0,83</b>	Ì
	14		6 0 50,32			65 55 46,69		-0,32	
	16		11 37,21	37,13		65 53 0,14		-0,10	-
	17	34 39,8	16 59,88			65 52 42,35		-1,07	
	18	37 6,7	22 23,88	23,57		65 53 5,23	5,49	+0,26	,
	25	47 5,5	7 0 0,15	0,52		66 15 56,65		-0,40	
July	9	1 5 36.0	8 13 45,45	45,60		68 42 55,29		+3,59	
<b>j</b>	11	7 59,0	24 2,14	2,31		69 14 12,03	14,32	+2,29	
	12	9 8,9	29 8,75	9,08	+0,33	69 30 45,00		+0,33	
	13	10 17,6	34 14,98		-0,42	69 47 52,42		-1,52	
	14	11 25,3	39 19,26		-0,41	70 5 33,05		-2,51	
	20	17 44,9	9 9 18,85		-0,01	72 2 45,60		+0,77	
	23	20 37,5	24 2,09	2,11	+0.02	73 8 5,48		+4,76	
	28	25 2,9	48 10,58	10,01		75 6 9,28	6,79	-2,49	
Aug.	9	33 44,5	10 44 12,29	11,97		80 26 37,46		-1,11	
444 <u>5</u> .	28	43 45,9	12 9 9,94		-0.52	89 58 59,54		-0.68	

183		7	Cime	Mean e of ation.	A. fro		A. R. from N. A.	Error of N. A.		P.		N. P. D from N. A.	Error of N. A.	REMARKS.
Sep.	13 14 20	1	51 52 55	26,0	24 51	59,89 28,49 32,75	59,53 28,00 32,14	-0,36 -0,49 -0,61	98 101	40 35	51,32 38,49 30,98	35,58	+4,94 +7,78 +4,60	
	21 22 23		-	2,6 40,2 18,5		5,77 40,08 15,01	5,39 39,48 14,44	$\begin{vmatrix} -0.38 \\ -0.60 \\ -0.57 \end{vmatrix}$	102	31	53,62 54,74 40,23	59,69	+1,87   +4,95   +7,11	

Observed Right Ascension and North Polar Distance of Mars, compared with the places interpolated from the Nautical Almanac.

t															
i	- 1	Mad	ras	Mean		A.	R.	A. 1	R.	Error	N	. P. D.	N.P.D	Error	I
183	6.	T	ime	of		fro		fron		of	•	from	from	of	REMARKS.
1		Obs	erve	ation.	O		ation.	N.		N. A.	Oh	servation.	N. A.	N. A.	LUDMA KAS,
<u> </u>	1							l		<u> </u>			<u> </u>	1	L
١		h.		<b>5.</b> .		. m		"		"	0	1 11	1 "	1 *	
July	18	20		19,2	4	28	9,90	9,5		0,38		28 40,56		+ 0,73	
	19		39	19,2	Ì	31	4,83	4,5	4	-0,29	68	21 27,46	26,03	1,43	i
Aug.	26	19	58	22,0			<i>5</i> 0,0 <b>7</b>	49,9	9	<b> </b> 0,08	_				1
Sep.	9	19		7,5			44,13	43,5	9	-0,54	66	39 51,28	45,95	j - 5,33	1
1	11			30,3	7		59,07	59,2		+0,21		45 16,85		1,39	l
I	12			11,4	7		36,35	36,4		+0,05	66	48 18,11	11,23	- 6,88	ĺ
1	13			49,6	7	8	12,34	12,6	4	+0,30	66	51 21,35	16,36	- 4,99	
Oct.	13			10,4	8	20	40,78	41,0	5	1 +0,27	69	14 52,77	51,19	- 8,58	1
1	14	18	48	26,1	i	22	52,91	53,4	6	+0,55	_	·			!
183								1						1	i
Jan.	26			43,4			18,18	18,0		-0,18	71	19 39,84	27,37	-12,47	
1	27			22,4		38	53,01	52,4		-0,53		11 32,84	21,41	-11,43	!
1	28	13		58,4		37	25,45	25,1		-0,35		3 23,76	14,12	- 9,64	1 .
1	29	13		34,3		35	56,24	55,9	9	0,25	70	55 18,18	6,21	-11,97	
I	31	12	49	40,2		<b>32</b>	53,67	53,2	7	-0,40		39 11,00	58,35	-12,65	
Feb.	2	12		42,2		29	46,43	45,6	4	-0,79		23 19,06	4,87	-14,19	
Ī	3			10,5	1		10,84	10,4	5	0,39		15 31,87		-15,66	
i	4			38,4		26	35,03	34,5		0,44		7 49,57	34,20	_15,37	į į
l	5		22	6,5		24	58,66	58,2		<b>—0,4</b> 0		0 16,20		-16,16	j
	6			34,7		23	22,17	21,6	1	0,56	69	52 50,49	34,66	15,83	i i
1	7		11	0,9		21	45,46	44,8	9	-0,57		45 32,92		-14,41	
ı	8		5	20,5		20	8,44	8,2	0	-0,24		38 26,93		_12,77	į į
1	9	11		58,1			32,49	31,7		0,75	69	31 32,82	20,48	-12,34	i
}	10		<b>54</b>	27,3			56,68	56,1	0	0,58		25 50,37	38,95	-11,42	
ł	11		48	55,6			21,48	21,0		0,39		18 20,70	11,67	9,03	
1	12		43	19,6			47,21	46,7		<b>0,50</b> )		12 4,45	55,18	- 9,27	
1	13		37	25,8		12	13,99	13,5	3	<b>—0,4</b> 6		7 1,36	53,89	7,47	
i	14			29,6			41,96	41,2	7	0,69		0 13,57	7,57	- 6,00	
1	15		27	3,7	•	9	11,37	10,8	7	0,50	68	54 42,75		7,68	
1	17		16	14,4		6	14,73	14,4		-0,33		44 23,73	18,02	- 5,71	
1	18			53,8			49,42	48,8	5	0,57		39 37,07		- 4,41	
i	19		6	34,7		3	25,69	25,2		0,48		35 8,82	2,22	- 6,60	}
1	26	10		25,9	8	44	46,47	45,7	0	-0,77		11 24,99	17,89	7,10	l l
1	27			25,6	j		42,33	42,0	5	-0,28		9 5,45	59,41	- 6,04	
1	28			29,8	l		42,18	41,3		-0,86		7 2,50	57,11	- 5,39	
Mar.	1	_	14	36,1	l		34,21	43,6	0	0,61		5 14,93	10,55	<b>- 4,38</b>	1
1	4	9	<b>5</b> 9	14,5	1	49	9,21	8,4	5	-0,76		1 28,08	24,94	- 3,14	
l	5		<b>5</b> 5	32,8	ŀ	48	23.88	23,1		-0,75		0 43,10			
										<u> </u>				- 2,01	

1837.	Madras Mean Time of Observation.	A. R. from Observation.	A. R. from N. A.	Error of N. A.	N. P. D. from Observation.	N. P. D. from N. A.	Error of N. A.	Remarks.
}	h. m. s. 9 50 54,5 7 46 20,1 8 41 48,7 9 37 20,4 10 32 55,6 11 28 33,5	45 54,54 45 25,53 44 59,53	40,96 2,06 26,44 54,05 24,91 59,03	-0,66 -0,67 -0,67 -0,49 -0,62 -0,50	68 0 12,89 67 59 56,98 67 59 55,96 68 0 8,36 0 35,87 1 15,99	54,75 53,67 6,67 33,71 14,51	-2,60 -2,23 -2,29 -1,69 -2,16 -1,48	
	12 24 15,6 13 19 59,8 16 7 33,6 17 3 30,7 18 8 59 31,2	44 17,53 43 38,65 43 31,69	36,41 17,00 37,90 31,13 27,45		2 11,06 3 18,38 7 53,22 9 50,11 11 58,38	15,71 53,06 48,55	$ \begin{array}{c c} -2,32 \\ -2,67 \\ -0,16 \\ -1,56 \\ -2,30 \end{array} $	

Apparent Right Ascension and North Polar Distance of VESTA, compared with the places interpolated from the Nautical Almanac.

1836.	Madrus Mean Time of Observation.	A. R. from Observation.	A. R. from N. A.	Error of N. A.	N. P. D. from Observation.	N. P.D. from N. A.	Error of N. A.	Remarks
Mar. 11 12 13 14 14 16 17 22 22 22 22 24 April	Observation.	h. m. s. 12 10 9,52 9 17,54 8 25,60 7 32,16 6 38,42 5 44,51 4 49,77 2 5,05 1 9,40 0 14,29 11 57 28,87 56 34,76 54 47,25 53 44,11 51 19,30 50 29,37 49 5,02 47 19,16 46 34,11 45 50,56 45 8,05 44 26,92 43 47,05	N. A.  11,57 19,88 27,64 34,44 40,81 46,72 52,21 7,03 11,76 16,49 31,54 37,12 49,61 56,68 21,93 31,89 7,49 21,50 36,59 52,89 10,45 29,32 49,51			N. A.		
	13	42 31,72 41 56,42 41 22,37 40 50,35 40 19,39 5 39 50,31 7 39 22,77 8 38 57,18	33,82 58,77 50 24,48 52,52 54,48 52,52 31 11 11 11 11 11 11 11 11 11 11 11 11 1	2,10 2,35 2,11 2,17	75 19 46,91 75 18 49,17 75 18 5,45 75 17 38,25 75 17 26,25 75 17 31,85 75 17 51,06 75 18 25,86 75 20 23,88	55,23 55,71 13,79 45,02	8,32 6,54 8,34 6,77	

1836.	Madras Mean Time of Observation.	A. R. from Observation.	A. R. from N. A.	Error of N. A.	N. P. D. from Observation.	N. P. D. from N. A.	Error of N. A.	Remarks.
April 23 26 27 28 1837.	18 19,7 14 6,5	h. m s. 11 37 50,11 36 45,21 36 33,34	Places given approximately only in the N. A.	*	75 21 45,89 75 27 19,66 75 29 37,78 75 32 10,81	*	•	
Aug. 27 28 29	47 9,6	23 15 14,52 14 22,13 13 30,21		+1,61 2,26 1,83	106 3 37,22 106 11 42,15 106 19 44,08	26,14	-16,88 16,01 17,21	
Sept. 13 14 21 22 23 24	11 29 41,5 25 3,3 10 51 45,4 47 4,0 42 23,6 37 44,3	22 59 56,73 59 4,39 53 16,73 52 31,02 51 46,33	58,60 6,02 18,77	1,87 1,63 2,04 1,86 1,76 1,83	108 3 35,34 108 9 5,66 108 41 15,29 108 44 55,29 108 48 20,64 108 51 31,98	23,72 53,03 4,36 44,56 10,45 21,98	11,62 12,63 10,93 10,73 10,19 10,00	
27				1,62	108 59 40,51	29,75	10,76	

Apparent Right Ascension of North Polar Distance of Juno, compared with the places interpolated from the Nautical Almanac.

1830	6.	1	ime	Mean of ation.		i. frot		A. R. from N. A.	Error of N. A		P. fron		N. P. D. from N. A.	Error of N. A.	REMARKS.
_			m.	8.	h. 1		8.	*	"	0	,	*	"	"	
Jan.	2	11			1		39,36	35,76	-3,60	89		24,11	44,32	+20,21	
	3	l	46		1		46,65	42,97	3,58	89	20	5,30		23,03	
	6	1	31	44,1			11,25	7,59	3,66	89	2	40,10	1,45	21,35	
	7		26				20,57	17,09	3,48	88		18,76	41,00	22,24	(a Star ob-
	8	1	22			31	30,89	27,42	3,47	88			1		
	11		8	0,7	۱ '	$^{29}$	6,84		3,55	88		27,83		23,95	( mistake.
	13					27	36,25	32,42	3,83	88		14,16		21,52	
	14			58,€			52,38	48,77	3,61	88		17,82	38,50	20,68	(a Star ob-
	16			43,2		25	28,83	25,29	3,54	87				]	<b>∣</b> ≰ served by
i	24			43,4		20		51,09	3,64			32,10		21,07	(mistake.
	31	9	38	42,7	l	18	24,98		3,25			43,67		19,02	
Feb.	1	!		30,0	1	18	10,90	7,79	3,11			41,71	58,31	16,60	
183	2 7.		30	22,9		17	58,61	55,75	2,86	85	7	33,56	51,80	18,24	
April	11	12	27	41,2	13	46	49,29	44,93	4,36	i 89	53	47,86	40,43	_ 7,43	very faint.
• • • • • • • • • • • • • • • • • • • •	12			58,3		46	1,96		4,10			26,13		7,72	
i	18			•		41	17,56		3,29		3	54,29	51,62	_ 2,67	
l	23		31			37			3,82	•		21,51	20,65	-0.86	
l	27		12		_					88	7		35,05	- 6,07	

Apparent Right Ascension and North Polar Distance of Pallas, compared with the places interpolated from the Nautical Almanac.

1836.	Madras I Time Observa	of	A. from Observ	m	A. R. from N. A.	Error of N. A.	N. P fro Observ	m	N.P. D from N.A.	Error of N. A.	Remarks.
Aug. 17 Sep. 16	1	55,3			29,49 47,46	+1,70 1,35		7 5 25,87 2 58,84			
1837. Oct. 13	•	29,5 32,4		4,00 54,80	7,73 58.13	+3,73 3,33		46, <b>4</b> 9 57,40		20,91 14,97	
23 25	3 2	36,2 7,6	10	29,23 52,42	32,96 56,21	3,73 3.79	111 0	57,31	44,09	13,22 13,42	

Apparent Right Ascension and North Polar Distance of CERES, compared with the places interpolated from the Nautical Almanac.

183		1	l'ime	Mean of ation.	A. fro Observ		A. R. from N. A.	Error of N. A.	N. P. D. from Observation.	N. P. D. from N. A.	Error of N. A.	Remarks.
		h.	m.	s.	h. m.	8.	*	1 *	0 / //	1 4	1 "	
Sep.	12	12	1	0,3	23 28	10,79	10,70	-0,09	110 44 57,12	48,64	- 8,48	
Oct.	1	10	31	16.5	13	7,18	7,04	-0.14	111 42 16,52	10,08	6,44	1
i	3		22	3,4	11	45,90	45,67	-0.23			3,61	l
1	6	ļ.	8	21,6		50,94	51,04	+0.10		15,63	5,24	
l	7	l	3	49.8	9	14,92	14,95	+0.03			8,45	
l	8	9	59	18.8	8	40,05	39,89	-0,16			6,63	
183	7.	!		1		,		1	·	'	,	
Dec.	17	111	14	40,6	4 59	17,27	18,35	+1,08	67 37 36,77	28,96	<b></b> 7,81	6.3
	18			45,8		17,05		+0,82	35 36,44			[obsd. at circle Probably a star

Apparent Right Ascension and North Polar Distance of JUPITER, compared with the places interpolated from the Nautical Almanac.

183		Т	'ime	Mean of ation.	A. fro	m	A. R. from N. A.	Error of N. A.	N. P. D. from Observation.	N. P. D. from N. A	Error of N. A.	REMARKS.
		h.		8.	h. m.	8.	7	1000	0 / 4	56.60	1000	
Jan.	2 6	12 11	2 43	<b>22</b> ,3		57,33 37,85	57,62 38 19	+0,29 +0,34	66 54 53,56 51 50,89	56,62 49,94	+3,06   -0,95	!
1	7	11	38	38,4	44	3,14	3,55	+0.34   +0.41	51 3,99	4,82	+0.93	l
	8	l	34	8,3		28,57	29 04	+0.47	50 20,34	20,40	+0.06	1
ļ	9		29	38,4		54,34	54,70	+0.36	49 35,37	36,77	+1,40	
	11				41		46,60	+0,46	48 9,87	11,62	+1,75	i
	13		11	39,4	40		39,48	+0,39		48.81	+1,27	
	14		7	9,7	40	6,08	6,34	+0,26	46 8,92	8,69	-0.23	
l	16				39	0,08	0,72	+0,64		51,05	+0,70	
l	19			50,6		25,43	25,98	+0.55	43 3,52	0,41	-3,11	
l	20		40			54,52	55,15	+0,60	42 27,22	25,10	-2,12	
	24		22	41,9	34				40 12,65	12,45	-0,20	
	31	9	<b>52</b>	6,8	31	51,27	51,39	+0,12	36 51,96	52,39	+0,43	
Feb.	1		47	46,8	31	27,27	27,50	+0,23	36 27,52	27,05	-0,47	
<u> </u>	2		43	27,4	31	3,90	4,24	+0,34	36 0,43	2,54	+2,11	
l	3	1	39	9,4			41,67	+0,07	35 38,71	38,82	+0,11	
l	4	!		51,7	30	19,84	19,82	0,02	35 14,70	15.81	+1.11	
1	4 5 7		30	34,5	29	58,75		0,07	34 53,33	53,40	+0,07	
i			22	3,6	29	18,81	18,64	-0.17	34 11,73	11,47	-0,26	
1	8	1	17	48,5	29	0.09	59,74	0,35	33 51,93	51.56	-0,37	
ł	10	l	9	20,9	28	24,60	24,29	0.31	33 14,51	13,83	-0,68	
j	11	١,	5	8,9	28	8,03	7,74	-0,29	32 <i>55</i> ,8 <b>6</b>	56,02	+0,16	
1	13		56		27	37,10	36,97	-0.13	32 23,25	22,58	-0.67	
1	14		52		27	23,24	22,86	-0,38	32 6,65	6,91	+0,26	
ĺ	15		48	27,2	27	9,76	9,57	-0,19	31 53,05	51,84	-1,21	
i	16			, ,		57,69	57,12	-0,57	31 —	37,47	1	
İ	17		40		26		45,52	-0,40	31 25,73	23,61	-2,12	
i	18		36	5,0	26	35,06	34,76	-0,30	31 13.23	10,54	-2,69	
1	21		23		26	8,13	7,61	-0.52	29 37,60	35,13	-2.47	
	23		15	44,9	25	54,10	53,81	-0,29	30 13,28	14,53	+1,25	

Apparent Right Ascension and North Polar Distance of JUPITER continued.

18	36.	Madras Mean Time of Observation.	A. R. from Observation.	A. R. from N. A.	Error of N. A.	N. P. D. from Observation.	N.P.D. from N. A.	Error of N. A.	REMARKS.
Feb.			h. m. s. 6 25 39,63	39,62		66 29 49,59	49,03		
Mar.	27 14		25 36,69 26 43,43	35,82 43,41	-0.87 -0.02	29 40,27 28 55,84	40,62 57,65	+0,35   +1,81	
	17	46 43,8	27 19,37	19,43			6,15	-1,10	
	18 19		27 32,89	32,87		29 8,25	10.16	+1,91	
June	15		27 47,77 7 25 30,81	46,90 30,55		67 40 57,52	14,88 54,34	-3,18	
Sep.	9	21 27 1,2	8 43 54,63		0,28		42,30	-2,09	
p.		21 17 34,2	46 15,62		+0.21	32 25,11	21,51	-3,60	i
	20	20 52 8,8	52 19,45		-0,54	55 14,36	13,07	-1,29	j
Oct.			9 0 39,90		0,08	72 27 37,17	38,85	+1,68	1
		20 10 0,2	1 18,98		-0,06	30 13,32	10,76	-2,56	!
	6 12	20 0 7,5 19 40 4,2	3 13,54	13,25		37 48,45	49,23	+0,78	ł
	13	19 40 4,2 36 46,0	6 49,94 7 24,98		0,05 0,73	52 14,50 54 35,48	15,62 35,05	+1,12 $-0,43$	I
	14	33 24,3	7 58,53		-0,73 -0,37	56 50,97	50,71	-0,45 -0,26	1
	19	16 21,1	10 40,39	1 1	-0,58	73 7 46,61	44,83	_1,78	1
183	7.				•		'	-/-	I
Jan.		12 43 19,7	9 6 49,00	48,29	0,71	72 29 15,51	14,28	-1,23	i
	27	38 52,4	6 17,72	16,93	0,79	26 51,27	50,01	1,26	1
	28	34 24,4	5 46,19	45,41	0,78	24 25,75	25,70	0,05	1
	29 31	29 57,4 21 1.9	5 14,30 4 10,71	13,76	0,54 0,55	22 1,82 17 15,35	1,49 13,57	0,33 1,78	Į.
eb.	2	21 1,9   12 7,1	3 6,95	6,31	0,64	12 32,37	27,37	5,00	- 1
CO.	3	7 38,2	2 35,13	34,41	0,72	10 8,34	5,06	3,28	I
	4	3 10,6	2 3,31	2,53	0,78	7 46,85	43,75	3,10	Į
	5	11 58 42,8	1 31,10	30,68	0,42	5 24,68	22,99	1,69	1
	6	54 16,4	0 59,56	58,90	0,66	3 6,13	3,13	3,00	i
	7	49 46,8	0 27,79	27,21	0,58	0 44,61	44,27	0,34	j
	8 9	45 21,5	8 59 56,18	55,64	0,54	71 58 28,37	26,51	1,86	1
	10	40 53,7 j 36 27,1	59 24,85 58 53,50	24,20 52,93	0.65 0,57	56 9,43 53 55,91	10,05 54.79	+0.62 $-1.12$	
	iil	31 59,2	58 22,30	21,81	0,49	51 44,00	40,93	3,07	1
	12	26 26,3	57 51,39	50,97	0,42	49 28,67	28,57	0,10	1
	13	23 6,8	57 21,05	20,33	0,72	47 18,95	17,80	1,15	
•	14	18 39,5	56 50,52	49,80	0,72	45 9,30	8,05	1,25	i
	15	14 14,9	56 20,46	19,72	0,74	43 3,05	1,60	1,45	1
	17	5 22,3	55 21,05	20,49	0,56	38 53,68	52,60	1,08	1
	18	0 58,4	54 52,10	51,38 22,63	0,72 0,59	36 53,07 34 52,83	51,05 51,59	$\frac{2,02}{1,24}$	1
	20	52 9,7	55 23,22   55 54,95	54,26	0,59	32 52,66	54,14	+1,48	1
	21	47 45,5	53 26,69	26,29	0,40	31 2,09		-3,36	!
	26	24 53,7	50 13,59	13,04	0,55	21 57,26	56,45	-0.81	}
	27	20 32,3	49 48,41	47,84	0,57			-1,31	1

Apparent Right Ascension and North Polar Distance of SATURN, compared with the places interpolated from the Nautical Almanac.

April 13 14 15 16 17 19 20 22 23 24 26 28 29 May 1 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 8 May 1	+			of		fro	R.	A. F		Error of	N	. P. D. from	1	N. P. D. from	Error of	RRMARKS.
April 13   14   15   16   17   19   20   22   23   24   26   28   29   May		Ouse		tion.	Ob		ation.	N. A		N. A.	Ob	servation.		N. A.	N. A.	ICRMARKS.
14 15 16 17 19 20 22 23 24 26 28 29 May 1 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1		h. 1		s.		$\overline{m}$ .	8.	7		7	0	10.07	Ţ	7	, , ,	
15 16 17 19 20 22 23 24 26 28 29 May 1 15 18 19 23 28 11 12 13 14 17 20 28 30 June 10 11 12 13 14 17 20 28 30 July 2 1837. May 1					14		21,56	21,6		+0,04	99	48 37,1		53,39	+16,29	
16 17 19 20 22 23 24 26 28 29 May 1 15 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. May 1 28 May 1			33	8,6			4,47	4,5		+0,09	1	47 3,49		19,93	16,51	
17 19 20 22 23 24 26 28 29 May 1 5 7 8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1				55,0			47,23	47,4		+0,22 $-0,18$	1	45 28,8 43 54,8		46,37	17,57 17,65	
19 20 22 23 24 26 28 29 May 1 5 7 8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 837. Mar. 2 May 1 23 34				43,4 29,0			30,29 12,89	30,1 13,0	3	-0.18		42 21,3		12,45 39,05	17,69	
20 22 23 24 26 28 29 May 1 15 11 15 18 19 23 28 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 23			12	3,0			38,20	38,4		+0.14		39 13,7		31,83	18,05	
22 23 24 26 28 29 May 1 15 18 19 23 28 19 23 28 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 23 44 23 30 44 45 23 30 46 47 20 28 30 47 48 48 48 48 48 48 48 48 48 48				49,7			20,97	21,0		+0,12		37 41,4		58,67	17,21	
23 24 26 28 29 May 1 57 8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 23 4		11		23,4			46,34	46.3		+0.02		35 33,4		52,55	19,10	
24 26 28 29 May 1 5 7 8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 2 3 4			55	9,8			28,86	28,9		+0,13		33 2,5		19,89	17,39	
26 28 29 May 1 5 7 8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 2 3 4				57,2			11,59	11,6		+0,05		31 27,8		47,63	19,83	
29 May 1 4 5 7 8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 2 3 4 May 1 2 3 4				32,7			36,90	36,9		+0,09		28 25,6		44,31	18,68	
May 1 4 5 7 8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 2 3 4			34	4,4		1	2,32	2,4	7			25 23,3		42,69	19,32	
June 10 28 30 July 2 4 1837. Mar. 2 8 May 1 2 3 4				50,6		0	45,15	45,2	8	+0,13		23 51,9	2	12,65	20,73	
5 7 8 9 11 15 18 23 28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 May 1 2				25,3			10,91	11,1	4	+0,23		20 54,8		14,61	19,77	
7 8 9 11 15 18 23 28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 May 1 2				47,2			20,85	20,5		-0,26		16 31,8		53,49	21,67	
8 9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. 4 Mar. 2 May 1	5			35,2		59	4,03	3,9		-0,09		15 6,1		28,12	22,02	
9 11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1				10,3			31,13	31,8		+0.67		12 18,9		39,91	20,94	haze.
11 15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 May 1	8		52	1,0			14.95	14,7		-0,24		10 59,3		17,28	17,96	
15 18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 May 1				44,9			58,60	58,5		-0,04		9 34,7		55,35	20,65	
18 19 23 28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 May 1 2 May 1				22,5			26,68	26.7		+0,03		6 55,9		15,19	19,26	
19) 23 28 June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 2 3 4 May 1 2				38,2			25,19	24,9		-0,21	00	1 46,4	2	8,87	22,45	
23 28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 8 May 1 2			10	5,2			40,63	40.7		+0,09	90	58 12,2		32,98	20,74	
28 June 10 11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 8 May 1 2		0		55,1 17,0			26,35	26,3		+0,04	İ	57 3,4		23,85	20,43	
June 10 11 12 13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 2 3 4		9	49 00	34,1			31,37	31,3		+0,01		52 40,9 37 47 0		2,13	21,20 23,71	
11 12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 May 1 2 3				17,1	Ì		28,28 17,72	28,3		+0.04 +0.18		37 47,9 38 40,4		11,61 4,31	23,84	
12 13 14 17 20 28 30 July 2 4 1837. Mar. 2 May 1 2 3				13,9	l		10,34	10,0				38 10,8		35,73	24,90	
13 14 17 20 28 30 July 2 1837. Mar. 2 May 1 2 3			27	9,8	1	5 l	2,68	2,0		-0,27 -0,10		37 45,2		9,15	23,94	
14 17 20 28 30 July 2 4 1837. Mar. 2 8 May 1 2 3			23	6,8			55,73	55,4				37 22,8		44,57	21,74	
17 20 28 30 July 2 1837. Mar. 2 8 May 1 2			19	4,4	!		48,89	48,6				36 58,2		22,09	23,87	
20 28 30 July 2 1837. Mar. 2 8 May 1 2 3			6	2,2			30,38	30,3		-0,08		36 4,6		27,24	22,63	
28 30 July 2 1837. Mar. 2 8 May 1 2 3		7		41,2			15,29	15,1				35 28,4		50,48	22,08	
July 2 1837. Mar. 2 8 May 1 2 3			23	3,8		49	51,06	50,8				35 24,7		47,10		
1837. Mar. 2 8 May 1 2 3	0		15	9,5			48,69	48,1		0,46		35 44,3		7,74	23,41	
1837. Mar. 2 8 May 1 2 3	2			16,5		49	47,61	47,4	1	-0,20	i -		- 1			
Mar. 2 8 May 1 2 3 4	4	. 6	59	25,3		<b>4</b> 9	48,16	47,8	37	0,29	-		- 1			
May 1 2 3 4				20 -	١,_	_							_ [	_		l I
May 1 2 3 4				23,2	15		27,46	27,1		-0,29		35 48,4		6,56	18,07	
2 3 4				26,9	١,,	1	7,60	6,1				33 3,7		19,72	15,99	
3 4		12	ij	35,7	14		32,50	31,8			103	36 15,2		39,22	23,94	
4				22,1			14,13	14,1		+0,02	I	34 55,8		20,41	24,54	
		11	3	8,3			56,67	56,4		0,25	Ì	33 36.89		59,80	22,98	
				54,6			39,01	38,6		0,33	1	32 17,79		41,39	23,67	
12			29 25	19,9 6,6			35,43 17,91	34,9		0,49	!	23 19,44 22 4,9		42,22	22,78	
14				40,0			43,12	17,4 42,1	4	-0,49 $-0,98$	ŀ	22 4,9	۱ ۲	26,81	21,86	
15				27,7			25,98	25,3		<b>-0,98</b> <b>-0,60</b>	_		- 1			
				26,3		41	23,17	22,2		<b>0,80</b> <b>0,94</b>	-	1 38,4	4	58,32	19,88	
July 11				13,1			17,05	16,7		-0.28	102	42 43,6		3,22	19,62	
Aug. 8				53,4		37	3,82	3,1		-0.70		58 55,10		15.56	20,46	

Apparent Right Ascension and North Polar Distance of Georgian, compared with the interpolated place from the Nautical Almanac.

183		7	Cimo	Mean e of ation.		A. fro		A. R. from N. A.	Error of N. A.		froi	D. n ation.	N. P.D. from N. A.	Error of N.A.	Remarks
		h.		8.		m.		*	. *	0	′	7	1 "	1 *	
Sep.	16	10	33	18,2	22	16	0,62	4,23	+3,61	101	37	29,65	21,93	7,72	
•	23		4	51,0		15	5,11	8,76	3,65		42	34,57	26,20	8,37	
Oct.	1	9	32	26,9		14	7,93	11,49	3,56	ļ	47	43,17	36,12	7,05	
	3		24	22,0		13	54,96	57,39	2,43	1	48	53.13	46,28	6,85	
	6		12	15,6		13	35,99	39,73	3,74	Ì	50		25,72	7,13	
	7		8	14,2		13	30,22	33,79	3,57	1	51	2,40	57,20	5,20	
	8		4	11,3		13	24,49	28,03	3,54		5 l	33,63	27,78	5,85	
	10	8	56	9,4		13	13,40	16,83	3,43	İ	52	35,21	26,44	8,77	
	11		52	7,9		13	7,90	11,48	3,58		53	3,26	54,52	8,74	
	12		48	6,4		13	2,60	6,30	3,70	1	53	29,29	21,70	7,59	
	13		44	6,2		12	57,72	1,26	3,54	1	<b>53</b>	55,54	47,88	7,66	
	14		40	5,3		12	52,90	56,39	3,49	İ		21,03		7,97	
	15		36	4,8		12	48,43	51,68	3,25	1		44,75		7,38	
183	7.								•			-	1	1	l .
Aug.	28	12	11	20,8	22	34	28,67	32,89	+4,22	99	51	42,94	27,19	15,75	1
_	29		3	18,0	22	34	19,78	23,92	4,14	l	52	37,60	20,30	17,30	}
Sep.	13	11	2	5,5		32	6,16	10,41	4,25	100	5	36,65	21,10	15,55	
•	14	10	58	1,0		31	57,58	1,81	4,23		6	26,69	10,88	15,81	1
	21		29	31,7		30	59,38	3,33	3,95	1	12			16,09	
	22		<b>2</b> 5	27,9			51,50	55.27	3,77	1	12	49,62		15,66	
	23			24,0		30	43,32	47,29	3,97	1	13	38,22		18,60	
	24		17	20,3		30	35,38	39,30	3,92	1		20,42		15,64	
	27		5			30	12,10	16,14	4,04	l		33,32		17,06	:

Comparison of the Observed Right Ascension and North Polar Distance of the Moon, with the interpolated place from the Nautical Almanac.

18 <b>5</b> 6.	Madras Mean Time.	Limb Observed.	Observed A. R. of )'s Centre.	A. R. from N. A.	Error of Tables	N. or S. Limb.	Observed N. P. D. of y's Centre.	N. P. D. from N. A.	Error of Tables.	Remarks.
Jan. 2 3 25 26 27 28 31 Feb. 1 26 27 28 29 Mar. 2	11 51 31,4 5 51 46,9 6 34 29,8 7 18 44,8 8 5 11,4 10 36 37,1 11 28 26,5 12 20 17,1 7 36 11,8 8 27 34,0 9 19 24,1 10 10 40,3 11 0 38,8 11 49 4,4 12 38 22,4	1 1 1 1 1 1 1 1 1 1 1 1 1 1	h. m. s. 5 46 59,37 6 42 18,46 2 7 14,75 2 55 0,18 3 43 21,21 4 33 52,99 7 17 35,39 8 13 29,73 9 8 19,24 5 59 10,51 6 54 38,38 7 50 33,56 8 45 54,69 9 39 54,50 10 32 25,39 11 23 40,54 6 31 20,65	5. 58,73 18,03 14,92 0,48 21,09 52,66 34,73 29,17 18,91 10,45 38,51 32,95 53,31 55,57 24,61 39,90 20,19	*0,64 -,43 +,17 +,30 -,12 -,33 -,66 -,56 -,33 -,06 +,13 -,61 -,78 -,93 -,78 -,64 -,46	N. N. N. N. N.	64 6 46,9 65 30 40,8 79 8 ———————————————————————————————————	48,9 43,2 ————————————————————————————————————	+ 2,0 2,4 - 2,8 0,0 - 4,6 + 2,8 + 6,7 - 0,1 - 2,0 - 0,4 - 6,0 - 5,0 - 1,1 - 4,2	

LUNAR OBSERVATIONS.

## Comparison of the Observed Right Ascension and North Polar Distance of the Moon continued.

1836	3.	Madras Mean Time	Limb Observed.	Observed A. R. of J's Centre.	A. R. from N. A.	) or (8	Limb.	Observed N. P. D. of ")'s Centre.	N. P. D from N. A.	Error of Tables.	REMARKS.
Mar.	26 27	h. m. s. 7 9 30, 8 0 33,		h. m. s. 7 26 45,56 8 21 52,84	8. 45,74 53,11		N. N.	63 35 38,7 65 31 14,3	36,2	- 2,5 - 6,7	
	28 29	8 50 35, 9 39 20,	3   1	9 15 59,88 10 8 47,36	59,53 46,42	- ,35	N. N.	68 43 42,1	38,0	-4,1	
Ì	30	10 26 53,	1	11 0 23,89	23,25	,64	N.	73 5 16,0 78 24 41,8	14,2 40,0		
April.	31 1	11 13 49, 12 2 9,		11 51 24,81 12 42 44,91	24,29 44,54		N. N.	84 27 46,8 90 57 <b>2</b> 7,2	43,0 24,7	- 3,8	
	24 26	,		4 53 1,31 10 36 29,49	1,10		N.	67 4 24,8	22,6	- 2,2	
	27	9 3 11,	1	11 26 51,58	29,28 50,96		N. N.	75 43 26,6 81 23 26,6	22,6 25,2		
	28 29	,		12 17 21,58 13 9 6,85	21,16 6,59	-,42	N. N.	87 40 2,2 94 16 18,0	1,1	- 1,1	
May	30 26	11 27 25,	)   1	14 3 21,86	21,87	+ ,01	N.	100 59 31,1	17,1 35,1	+ 4,0	
	28	10 4 37,		12 43 33,97 14 30 45,25	33,86 44,96		N. N.	91 1 44,2 103 52 9,6	43,7 11,7		
July Aug.	26 21	10 35 18, 7 15 25,		18 54 15,57 17 16 17,22	15,50	,07   \$	S.	117 1 26,9	31,1	+4,2	
Sep.	18	6 10 7,	3 1	18 1 11,79	17,21 11,70	-,09	N. N.	116 3 25,6 117 18 36,3	22,9 35,2	-2.7 $-1.1$	
	19 20			19 7 58,78 20 13 42,79	58,87 42,76		S. S.	117 10 9,6 115 4 37,2	9,6	0,0	
	22 23	10 7 26,	7   1	22 14 51,33	51,80	+ ,47	S.	106 7 14,0	29,0 3,7	-10,3	
Oct.	17	5 8 37,		23 9 34,23 19 54 1,84	34,64 1,91		S. S.	100 6 47,9 116 2 34,1	36,2 34,1	-11,7	
	18 19			20 56 46,03 21 55 20,36	46,20 20,64	+ ,17   \$	s. s.	112 45 50,6	52,4	+ 1,8	
	20	8 52 20,	3 1	22 49 54,74	54,68	- ,06	s.	108 6 2,5 102 28 12,3	57,2 6,8	-5,5	
l	21 22	,,		23 41 20,27 0 30 46,95	20,47 46,97		S. S.	96 16 32,0 89 52 31,4	25,6 19,4	-6,4 $-12,0$	
Nov.	17 18	7 37 48,	3 1	23 25 32,91	33,03	+ ,12   \$	S.	98 15 1,9	0,5	- 1,4	
1	22	11 21 41,	3   1	0 14 40,50 3 29 45,94	40,53 45,68		S. N.	91 58 54,9 69 41 2,5	51,1 13,9	-3,8 +11.4	
Dec.	23 16			4 22 28,07 0 47 54,87	27,28 54,56		N. S.	66 1 25,7 87 30 7,8	24,5	- 1,2	
1	17 18	7 49 25,	3 1	1 35 25,93	26,02	+ ,09   8	S.	81 28 23,6	4,0 18,5		
	19	9 18 38,	3   1	2 23 25,05 3 12 48,90	24,90 48,78		s. s.	75 55 31,6 71 4 20,5	27,6 14.1	-4,0 $-6,4$	
	20 21	10	$\begin{bmatrix} 7 & 1 \\ 5 & 1 \end{bmatrix}$	4 4 13,34 4 57 42,05	12,76 41,47	- ,58	S. N.	67 7 29,7	25,5	- 4,2	
1837 Jan.	<b>7.</b>	•	ĺ	i		l i		64 17 12,1	11,1	<b>— 1,0</b>	First obs.
Jan.	18	8 51 51, 9 42 6,	)   1	4 40 18,98 5 34 42,28	19,22 41,53		S.   N.	64 52	4,4	<b> 0,2</b>	of P. M at Tran-
	19 20	10 33 19, 11 <b>24</b> 16,	3 ! 1	6 29 58,78 7 25 0,20	58,09	.   69,	N.	62 24 30,5	31,6	+ 1,1	Csit.
Fal	21	12 14 58,	6 Cent.	8 18 40,27	59,46 39,59	i — ,68   1	N. N.	63 11 1,3 65 15 43,5	1,3 42,4	-0.0	
Feb.	12 13		5   1 <b>4</b>   1	3 29 5,36 4 21 51,26	5,05 51,18		s. s.	69 13 13,9 65 38 27,8	12,0	<b>— 1,9</b>	
	14 15	7 37 27,	3   1	5 16 7,48	7,47	01   8	S.	63 17 21,4	27,6 25,6	-0,2 + 4,2	
<u> </u>		8 28 35,	51 1	6 11 20,74	20,70	- ,04	N.	62 16 32,0	31,3	-0,7	

LUNAR OBSERVATIONS.

Comparison of the Observed Right Ascension and North Polar Distance of the Moon continued.

183		Madras ean Time.	Limb Observed.	Observed A. R. of )'s Centre.	AR. from N. A.	Error of Tables	N. or S Limb.	Observed N. P. D. of N. Centre.	N. P. D. from N. A.	Error of Tables.	Remarks.
Feb.	17 10 18 10	57 59,8	1	h. m. s. 8 0 42,03 8 52 57,02	8. 41,23 56,03	s. -0,80 -0,99	N. N.	64 19 52,2 67 14 26,8	33,3		
Mar.		3 52 53,3	1 2 1 1	9 42 57,11 11 17 12,90 7 40 57,83 8 33 57,39	56,17 12,48 57,89 57,20	$\begin{vmatrix} -0.94 \\ -0.42 \\ +0.06 \\ -0.19 \end{vmatrix}$	N.   S.   N.   N.	71 11 36,0 81 24 14,3 63 23 17,2 65 53 53,0	20,5 56,3	+ 1,2 + 3,3 + 3,3	
	18 9 19 10 20 11 21 11	24 12,7 1 7 8,8	l l l Cent.	9 24 43,98 10 13 22,10 11 0 20,55 11 46 25,71	43,42 21,47 19,74 25,25	$ \begin{array}{c c} -0,56 \\ -0,63 \\ -0,81 \\ -0,46 \end{array} $	N. N. N.	69 31 2,7 74 3 37,1 79 19 49,5 85 7 34,6	43,7	+ 4,4 + 6,6 + 3,5 - 0,8	
April	27 16 28 17 16 9	6 40 26,1 7 41 12,7 9 1 55,9	2 2 1	16 59 56,80 18 4 47,48 10 41 15,14	56,90 47,48 14,46	+0,10 0,00 -0,68	S. N. N	116 27 35,0 117 57 51,8 77 1 52,5	39,0 62,2 58,8	+ 4,0 + 10,4 + 6,3	
May	18 10 19 11 20 11 15 8	54 58,4	l l Cent.	12 13 29,11 13 0 25,89 13 49 30,37 11 53 0,02	28,72 25,54 30,13 59,85	$   \begin{bmatrix}     -0,39 \\     -0,35 \\     -0,24 \\     -0,17   \end{bmatrix} $	N. N. N.	88 39 41,5 94 53 31,2 101 3 51,6 85 58 56,8	49,3 34,0 58,5 59,5	+ 2,8 + 6,9	
,	16 9 17 9 23 18	9 1 25,6 9 45 9,5 5 31 19,2	1 1 2	12 39 1,46 13 26 49,63 19 35 20,52	0,90 49,28 19,81	$\begin{bmatrix} -0.56 \\ -0.35 \\ -0.71 \end{bmatrix}$	N. N. N.	92 5 38,7 98 17 54,1 116 50 31,4	39,7 58,9 27,2	+ 1,0  + 4,8  - 4,2	
June	12 6 13 7 14 8	5 32 30,4 5 54 46,7 7 36 42,6 8 21 9,4	2 1 1 1	20 40 39,71 12 18 27,25 13 4 28,07 13 53 0,74	39,79 27,19 27,65 0,17	$ \begin{vmatrix} +0.08 \\ -0.06 \\ -0.42 \\ -0.57 \end{vmatrix} $	N. N. N.	113 42 21,6 89 31 95 35 16,3 101 36 45,3	19,1 50,2	+ 2,8 + 4,9	
	15 9 21 18 23 17 24 17	5 20 43,3	1 2 2 2	14 45 31,34 21 19 5,85 23 13 23,90 0 4 58,50	30,39 5,40 23,61 58,21		N.   S.   N   N.	107 17 52,1 110 13 35,4 98 49 16,2 92 9 9,5	13,2	- 1,1	
July	11 13 14	6 13 37,6 7 48 37,9 8 44 2,5	1 1 1	13 31 33,52 15 14 48,14 16 14 21,48	33,23 47,83 21,01		N. N. N.	99 16 36,9 110 10 32,4 114 24 45,7	30,8 36,6 49,3	$\begin{bmatrix} -6,1\\ +4,2\\ +3,6 \end{bmatrix}$	
Aug.	16 16	9 45 12,7 0 50 48,2 4 53 31,4 5 40 3,3	1 1 1 1 1	17	43,79 25,01 38,65 16,65		N. S. N.	117 10 38,9 117 58 20,3 103 8 1,9 108 25 22,9	45,9 26,9 5,5 19,1	+ 6,6 + 3,6	·
	10 11 12	6 31 21,7 7 28 12,2 8 30 10,4	1 1 1 1	15 47 43,47 16 48 42,95 17 54 50,04 19 44 2,60	43,70 42,95 49,96 2,77	+0,23 0,00 -0,08 +0,17	N. S.	112 57 32,4 116 18 50,5 118 0 27,2 117 39 1,5	38,8 55,1 38,9	$\begin{array}{c c} + 6,4 \\ + 4,6 \\ + 11,7 \end{array}$	
	20 10 21 10 22 1	9 <b>3</b> 5 15,1 6 <b>2</b> 55,2 6 51 39,0 7 <b>41</b> 45,2	2 2 2	1 58 2,48 2 50 50,84 3 44 58,30	2,23 50,59 58,79	$ \begin{array}{c c} -0.25 \\ -0.25 \\ +0.49 \end{array} $	N. N. N.	77 10 54,9 71 36 54,3 67 8 16,7	56,4 51,1 14,6	$\begin{vmatrix} + & 1.5 \\ - & 3.2 \\ - & 2.1 \end{vmatrix}$	
Sep.	12 1 13 1	7 19 5,6 0 22 39,3 1 17 38,4 2 11 52,7	1 1 1 2	18 33 56,93 21 49 46,48 22 48 49,50 23 44 54,88	56,84 46,46 49,61 54,89	-0.02 + 0.11	S. S.	118 14 38,6 107 53 25,8 101 25 42,4 94 17 35,6	33,2 17,5 40,5	5,4 $-5,4$ $-5,4$ $-5,4$ $-5,4$ $-5,4$ $-5,4$	
	15 1 16 1 17 1	3 1 52,5 3 51 13,6	2 2 2	0 39 0,32 1 32 26,80 2 26 21,28 3 21 29,36	0,37 26,80 21,07	+0,05  0,00  -0,21	N. N.	87 1 49,0 80 5 58,0 73 53 34,2	37,8 43,6 28,3	3 - 11,2 $3 - 14,4$	

Comparison of the Observed Right Ascension and North Polar Distance of the Moon continued.

183	7. Madras Mean Time.	Limb Observed.	Observed A. R. of )'s Centre.	A. R.	of	N. or S. Limb.	Observed N. P. D. of )'s Centre.	N.P.D. from N. A.	Error of Tables.	Remarks.
1	h. m. s.	1	h. m. s.	8.	8.	1	0 / 4	*	"	<u> </u>
Sep.	19 16 24 41,1	2	4 18 6,05	5,76	0,29	N.	64 53 5,1	56,2	<b>— 8,9</b>	
1	20 17 18 17,3	2	5 15 47,13	46,89	-0,24	N.	62 29 37,8	35,7	-2,1	
Oct.	9 8 10 17,9	1	21 23 30,59	30,90	+0,31	S.	110 22 37,4	34,4	-3,0	i
1	10 9 4 50,6	j 1	22 22 6,68	6,25	-0,43	S.	104 34 14,6	3,7	-10.9	
l	12 10 46 17,3	1	0 11 41,71	41,41	0,30	S.	90 42 42,6	36,0	- 6,6	
i	13 11 35 26,4	1	1 4 54,41	54,50	+0,09	S.	83 35 17,4	10,1	1 - 7.3	
Nov.	6 6 58 41.0	1	22 2 3,49	3,23	0,26	S.	106 40 57,1	53,6	-3,5	
l	7 7 49 34,2	j 1	122 56 59,54	59,40	-0,14	S.	100 26 36,5	37,3	+ 0,8	
Dec.	16 15 54 22,6	2	9 34 45,03	44,25	-0.78	S.	70 56 54,3	55,3	+ 1,0	

On looking over the observations of the last seven years; there have I find been a few observations of the Transit of both limbs of the Moon over the Meridian, which, in the former volumes of the Madras Results I had omitted; they are as follows.

Date.		Madras Mean Time	Sidereal Time of C's Diam.
		Mean Time	passing
1831		h. m. s.	m. s.
February	26	12 17 48,7	2 7,48
April	26	11 53 47,9	3,06
May	26	12 5 34,1	7,80
Septembe	r 21	11 51 30,6	12,48
1833			,
May	3	11 49 32,2	14,26
July	3 1	11 50 39,6	15,70
1834	-	22 00 00,0	20,50
February	23	12 15 27,8	23,48
1835	:	, •,	,
March	14	12 9 11,4	18,16
April	13	12 30 47,8	20,02
May	12	12 6 2,7	26,62
June	10	11 46 29,1	31,68
1836			,,,,,,
February	2	12 20 17,1	15,68
April	ī	12 2 9,2	13,16
1837	_ [		30,10
January	21	12 14 <b>45</b> ,5	14,70
March	21	11 50 11,2	5,32
April	20	11 54 58,4	12,08

In addition to the above,—observation of the Moon, and of several stars culminating near to her (Moon culminating Stars), have been made, as follows.

## LUNAR OBSERVATIONS.

Moon Culminating Stars.

1836	3.	Names.		Obse Tran		1830	6.	Name	es.	Observed Transit.
Jan.	2	ζ Tauri		h m. 5 29 5 44	s. 13,01 23,67	March	2	Moon n Leonis	lst Limb	h. m. s. 10 29 33,14 11 5 29,57
		Moon	1st Limb	5 47	15,50		- 1	, <u>Debits</u>		11 13 35,05
		μ Geminor.		6 14	24,52	İ	3	n Leonis	i	11 5 24,89
1	3	μ	1	6 14	25,66			٠	l	11 13 30,22
		Moon	1st Limb	6 42	35,02			Moon	2nd Limb	11 22 50,81
İ	25	Moon	1st Limb	2 7	8,55	!	25	Moon	lst Limb	6 29 4,45
1		38 Arietis	!	2 35	55.38		1	δ Geminor.		7 9 10,07
	26	38		2 40	2,41		00			7 15 22,75 7 9 6.03
l	20	π —	i	2 35 2 39	47,93 54,60	i	26	<i></i>		7 9 6,03 7 14 18,59
1		Moon	1st Limb	2 53	44,84		1	Moon	1st Limb	
I		n Tauri	Ter Timo	3 37	30,60		!	6 Cancri	10t Limb	7 52 12,86
	27	η		3 37	24,78	il	1	λ —		8 9 33,42
ļ		Moon	lst Limb		58,60		27	6		7 52 8,63
} .		€ Tauri	į	4 18	42,89		٠ ا	λ ——		8 9 29,20
1	28	δι	1	4 13	7,20	!	i	Moon	lst Limb	
ł				4 18	40,86			ξ Cancri		8 58 37,92
}		Moon	1st Limb	4 32	26,88			9		9 8 32,11
1	31	Geminor.	j	7 0 7 9	16,26	1	28.	Moon	1st Limb	
]		Moon	1st Limb	7 16	54,75	l	29	<ul><li>Leonis</li><li>Moon</li></ul>	lst Limb	9 56 57,56 10 6 16,16
}		• Geminor.	18t Limb	7 43	3,47 2,67			γ Leonis	18t Lillio	10 9 10,10
į		6 Cancri		7 53	1,65	li	30	k	i	10 36 13,85
Feb.	1	• Geminor.	I	7 43	0,29	l		Moon	lst Limb	
ł		6 Cancri	i	7 52	59,29	l	1	v Virginis		11 35 55,71
1	į	Moon	lst Limb	8 11	55,77	1	- 1	b ——		11 50 2,89
l	_ 1	& Cancri	1	8 59	28,24		31	v		11 35 50,90
1	2	£	a . !	8 58	25,24			Moon	1st Limb	
1	26	Moon	Cent.	9 7	49,79			b Virginis		11 49 58,01
ļ	20	c Tauri Moon	1st Limb	5 41 5 56	38,08 40,18	i	1	ς —— γ¹ ——	i	12 10 26,53 12 31 46,41
1		Géminor.	1st Limb	6 32	26,57	April	1	c		12 10 21,61
	27	6 —	1	6 32	22,59	Apia	- 1	~1	1	12 31 41,49
i		Moon	1st Limb		3,55		ļ	' Moon	Cent.	
1	28	• Geminor.		7 4l	<i>55</i> ,38	ll .		a Virginis		13 14 53,68
1		Moon	lst Limb		54,28		1	m	l	13 31 20,80
f		n Cancri	į	8 21	41,19	11	24	Moon	lst Limb	
I	90	γ		8 23	15,22	11	1	λ Leonis	è	9 23 59,84
i	29	η		8 21	36,24	1	OQ.	ψ		9 36 26,37
1	ı	Moon	1st Limb	8 <b>32</b> 8 <b>43</b>	10,50 10,41	!!	26	ρ		10 12 44,47 10 23 59,39
l	!	λ Leonis	A WOULD	9 20	44,34	l	į	Moon	lst Limb.	10 23 39,39
Marc	h 1	λ		9 20	39,32	11	27	σ Leonis	IST MINU.	11 14 35,98
	-	Moon	1st Limb	9 37	8,50	il	-•	7	l	11 21 25,43
1		γ Leonis		10 9	13,46	li		Moon	1st Limb	11 27 42,33
I		ρ		10 23	28,33	11		o Virginis		11 58 46,87
i	2	γ		10 9	8,38			η —		12 13 26,73
		ρ		10 22	23,21	<u>ll</u>	28	o		11 58 52,81

183	6.	Names	3.	O8served Transit.	1836.	Names	.	Observed Transit.
		***		h. m. s.	0		<u> </u>	h. m. s
Apri	1 28	η Virginis Moon	lst Limb	12 13 32,73 12 18 18,26	Oct. 20	δ Aquarii Moon	1st Limb	22 44 43,27 22 47 33,67
1		δ Virginis	18t Lind	12 49 22,75	1	n Piscium	18t Lino	23 38 17,48
ļ		θ		13 3 30,02	21	√3 Aquarii	1	23 9 11,17
l	29	δ	- 1	12 49 28,55	li	Moon	lst Limb	23 38 59,61
l	~•	θ		13 3 35,85	22	t Piscium		0 15 44,06
l		Moon	1st Limb	13 10 8,52		Moon	1st Limb	0 28 25,60
		k Virginis	i	14 6 17,56		e Piscium	ł	0 58 39,88
1		·		14 9 33,62	Nov. 17	φ Aquarii		23 4 46,89
}	30	Moon	1st Limb	14 4 27,03	1	ψ3 ——	1.4 7. 1	23 9 22,71
l		Virginis	ļ	14 9 38,84 14 44 2,77	]	Moon t Piscium	1st Limb	23 23 24,05 0 15 57,44
l		a <sup>2</sup> Libræ		14 44 2,77 14 50 6,46	18	Moon	1st Limb	0 15 57,44 0 12 36,69
May	26	γ¹ Virginis		12 32 50,72	1	m Ceti	15t Land	0 43 39,31
,		Moon	1st Limb		l	€ Piscium	l.	0 53 27,76
1	28	k Virginis	1	14 3 30,03	22	Moon	1st Limb	0 27 45,62
Į		λ —	- 1	14 9 35,47	i	A <sup>1</sup> Tauri	1	3 54 8,14
1		Moon	lst Limb	14 28 56,56		w³	1	4 6 47,09
l		ı¹ Libræ	- 1	15 2 13,83	23	A1	i	3 54 9,23
		ابر الم		15 25 42,39	l	ω²		4 6 48,21
July	26	λ Sagittarii	1	18 17 10,77	Dec. 16	Moon	2nd Limb	4 23 38,42
ļ		σ — Moon	1st Limb	18 44 25,29 18 52 17,82	Dec. 10	m Ceti Moon	1st Limb	0 43 42,30 0 45 54,53
}		59 Sagittarii	ist Lind	19 46 12,30	17	μ Piscium	18t Linio	1 20 35,09
l	ļ	c ——	1	19 51 53,71		γ		1 31 53,72
Aug.	21	θ Ophiuchi	ļ	17 11 38,30		Moon	1st Limb	1 33 20,55
		Moon	1st Limb	17 14 44,29	,	ξ¹ Ceti		2 3 18,59
Sep.	18	λ Sagittarii	1	18 17 33,19		£4	Į.	2 18 26,47
		γ²	<u>.</u>	17 55 20,02	18	ξ¹		2 3 14.95
	10	Moon	1st Limb	17 59 0,75		£2		2 18 22,81
l	19	σ Sagittarii ζ ——		18 45 8,33		Moon	1st Limb	2 21 15,27
i		Moon	1st Limb	18 52 13,07 19 6 46,20	19	ε Arietis	1	2 48 47,25 3 1 8,78
	20	Moon	1st Limb	20 12 29,35		Moon	1st Limb	3 10 34,98
ĺ	22	4 Aquarii	200 25.00	21 57 31,05	20	At Tauri	750 2	3 53 50,16
	~	θ	1	22 8 6,97		Moon	1st Limb	3 1 54,25
		Moon	lst Limb	22 13 38,00		⊌° Tauri	}	4 6 29,17
	23	δ Aquarii	ļ	23 45 50,72	21	7		4 31 10,42
1		ý	ا ا	23 5 43,78	100-	Moon	lst Limb	4 55 17,94
Oct	,,,	Moon	1st Limb	23 8 20,36 19 25 31,58	1837	Moss	1 a T:1	4 40 04 70
Oct.	17	h <sup>2</sup> Sagittarii c ——	j	19 25 31,58	Jan. 17 18	Moon β Tauri	lst Limb	4 40 24,70 5 17 1,95
	İ	Moon	1st Limb	19 51 22,05	10	β Taun		5 28 56,52
	- 1	ψ Capricorni	Tee Time	20 35 11,38	l	Moon	lst Limb	
	i	η	İ	20 54 52,59	19	k Aurige		6 5 58,19
	18	¥ —	į	20 35 11,16	1	μ Geminor.	ſ	6 14 4,46
	ļ	Moon	1st Limb	20 54 22,65		Moon	lst Limb	6 29 50,14
		δ Capricorni	Į	21 36 47,84		d Geminor.		7 11 21,60
	19	δ	ł	21 29 47,86		a <sup>2</sup>	į	7 25 10,10
		Moon	las Timb	21 36 47,08	20	δ	1 A T :1	7 11 18,54
		Moon τ² Aquarii	1st Limb	21 52 58,74	l	Moon 6 Capari	1st Limb	7 24 48,93 7 54 25,57
		8 ——	!	22 39 42,49 22 44 44,72	21	6 Cancri Moon	Cent.	8 19 32,79
	20	r <sup>e</sup>	j	22 39 40,93		ρ <sup>4</sup> Cancri	Оеці.	8 46 46,70
		•	ļ			ξ		9 0 52,11

183	7.	Nami	ES.	Observed Transit.	1837.	· Names.	Observed Transit.
Feb.	13	ω <sup>ջ</sup> Tauri		h. m. s. 4 8 13,97	Mar. 27	a Scorpii	h. m. s. 16 17 44,87
Feb.	10	n1		4 17 9,52	1 1121. 27	7	16 24 4,09
1		Moon	lst Limb	4 21 21,24		Moon 2nd Limb	
1		n Tauri		5 10 5,32		p Sagittarii	17 35 37,07
l	14	6		4 53 57,88	28	<i>p</i>	17 35 31,34
1		n		5 10 5,82		γ°	17 53 33,06
1		Moon	1st Limb	5 15 37,09	A	Moon 2nd Limb Moon 1st Limb	18 4 12,64 10 39 5,00
1	-	c Tauri n Geminor	i	5 43 42,76 6 5 39,08	April 16	Moon 1st Limb	11 6 12,96
ľ	15	c Tauri		5 43 42,05	j	7	11 18 26,08
i	10	n Geminor		6 5 39,37	18	o Virginis	11 55 43,62
		Moon	1st Limb	6 10 50,37		Moon 1st Limb	
i i		€ Geminor		6 34 31,45	!	γ Virginis	12 32 13,62
1	17	β		7 35 57,51		8	12 46 13,03
		φ <del></del>	1-47:1	7 44 8,44	19	γ'	12 32 11,79 12 46 11,28
		Moon δ Cancri	1st Limb	8 0 13,00 8 36 2,36	( 	δ — Moon 1st Limb	,
Ì	- 1	ρ Cancri	İ	8 36 2,36   8 46 30,95		a Virginis	13 15 24,48
	18	8	i	8 36 2,18	I	ζ —	13 25 11,10
		ρ4		8 46 30,55	20	a ——	13 15 22,97
l		Moon	lst Limb	8 52 29,17		ζ	13 25 9,92
1	- 1	λ Leonis		9 23 2,01		Moon Cent.	13 48 14,95
ĺ		0		9 33 4,26	}	λ Virginis	14 9 3,90
	19	λ	i	9 23 2,24	25	Moon 2nd Limb	14
		0	1-4 Timb	9 33 4,35	May 15	ξ <sup>1</sup> Virginis	· 11 36 37,63 11 41 57,00
	- 1	Moon	1st Limb	9 42 30,76 10 11 36,36	1	β —— Moon lst Limb	11 41 37,00
	21	γ Leonis x ——		10 57 15,45	1		12 11 15,91
			1	11 16 4,41	•	Moon 1st Limb	12 37 40,40
1		Moon	2nd Limb	11 18 51,23		θ Virginis	13 1 12,96
l		<ul> <li>Virginis</li> </ul>		11 57 33,16		a —	13 16 18,64
Mar.	16	Moon	1st Limb	7 39 57,32	17	θ ——	13 1 10,30
1	17	λ Cancri		8 9 52,44		α —— Moon lst Limb	13 16 16,25
l		ø <sup>2</sup>	lst Limb	8 15 57,80 8 31 53,89	1	Moon 1st Limb & Virginis	13 25 24,35 14 3 52,11
]		g Cancri	18t Limb	8 59 1,28	ĺ	λ ——	14 9 57,23
1		<i>q</i> ——		9 8 54,95	23	h² Sagittarii	19 26 10,72
1	18	ŧ	j	8 58 57,76		Moon 2nd Limb	19 35 54,80
1		<i>q</i> ——		9 8 51,64	24	ψ Capricorni	20 35 46,51
1	,,	Moon	lst Limb	9 22 38,51	I	Moon 2nd Limb	20 41 9,58
	19	π Leonis	i	9 50 30.56	June 12	Moon 1st Limb	12 15 52,27
l		Moon	lst Limb	9 58 35,96		κ Virginis	12 29 16,90 12 45 50,32
		k Leonis	136 121110	10 11 13,53 10 36 41,88	13		12 45 50,32 13 1 48,38
]		c ——	ļ	10 50 41,86	1	a Virginis	13 15 0,38
1	20	k ——		10 36 37,58	14	a ——	13 14 57,47
		c —		10 51 8,22		Moon 1st Limb	13 50 15,90
		Moon	lst Limb	10 58 8,36		λ Virginis	14 8 38,76
		v Leonis		11 27 26,64		a <sup>2</sup> Libræ	14 40 13,12
	21	β Virginis		11 41 2,66	15	λ Virginis	14 8 35,54
1	21	υ Leonis β Virginis		11 27 22,94	i	Moon 1st Limb γ Libræ	14 42 40,48 14 52 50,45
1		Moon.	Cent.	11 41 59,06   11 45 11,15		β	14 52 50,45
1		" Virginis	002.	12 10 20,88	21	, , , , , , , , , , , , , , , , , , , ,	20 34 25,13

## Moon Culminating Stars.

183	37	Name	28. ·	Observed Transit.	1837	Names.	Observed. Transit.
June	21	ζ Capricorni Moon	2nd Limb	h. m. s. 21 15 20,04 21 18 12,62	Aug. 13	Moon 1st Limb	h. m. s. 19 2 16,36 1 36 8,09
	23	4 Aquarii Moon	2nd Limb	21 55 36,10 23 14 4,70		γι Arietis	1 43 56,18
	24	τ Piscium	ZIIG IAMU	23 53 7,21	Ì	Moon 2nd Limb <sup>€</sup> Arietis	1 58 25,88 2 49 14,24
		Moon	2nd Limb	0 5 32,47	21	π	2 39 30,21
July	11	ι Ceti α Virginis		0 10 38,41 13 15 14,62	i	Moon 2nd Limb	2 51 12,53
<b>.</b>		Moon	1st Limb	13 29 7,87		g Arietis 9 Tauri	3 13 59,28 3 37 5,83
		Virginis		14 2 50,67	22	g Arietis	3 13 58,30
	13	λ αº Libræ		14 8 56,14		7 Tauri	3 37 4,87
	•	20		14 40 24.09 14 53 4,61		Moon 2nd Limb	3 45 20,55 4 15 50,06
		Moon	lst Limb	15 12 10,60	23	Moon 2nd Limb	4 40 57,52
		# Scorpii βι		15 47 32,52	Sep. 9	λ Sagittarii	18 16 48,50
l	14	<i>π</i> ——		15 54 30,36 15 47 29,08		Moon let Limb	18 31 34,67
1		β'		15 54 26,86		π Sagittarii   h² — —	18 58 57,58 19 25 40,86
		Moon	lst Limb	16 11 37,00	12	ζ Capricorni	21 16 9,59
		A Ophiuchi θ ——		17 3 49,01		8	21 36 50,65
	15	A		17 10 29,43 17 4 37,25	13	Moon 1st Limb σ Aquarii	21 47 21,92 22 20 46,81
		θ		17 10 25,03		δ ——	22 44 45,77
		Moon	lst Limb	17 16 52,42		Moon 1st Limb	22 46 24,36
		γ² Sagittarii		17 54 45,23	14	<b>₽</b> Aquarii	23 9 12,22
	16	70		18 8 58,36 17 53 40,77		n Piscium Moon 2nd Limb	23 38 17,04 23 44 41,56
l		i		18 8 53,95		n Ceti	0 20 26,43
		Moon	1st Limb	18 26 27,22	, ,	8 Piscium	0 38 57,03
Aug.	8	7 Sagittarii Moon	lst Limb	18 <i>55 5</i> ,88 14 0 11,98	15	n Ceti Moon 2nd Limb	0 20 24,07
		a <sup>s</sup> Libræ	ISC LAMIS	14 41 29,89		Moon 2nd Limb μ Piscium	0 38 43,56 1 20 19,36
l	9	20		14 54 10,36		y	1 31 37,50
	y	Moon	1st Limb	14 41 28,15	16	μ ——	1 20 16,30
		20 Libree	18t Limo	14 50 45,90 14 54 8,74	il	Moon 2nd Limb	1 32 6,86
İ		& Libree		15 32 10,20	il	v Arietis	2 2 59,07 2 28 11,46
l	10	b Scorpii		15 40 47,71	17	ξ <sup>1</sup> Ceti	2 2 57,53
1	10	& Libree b Scorpii		15 32 8,93 15 40 46,35		Moon 2nd Limb	2 26 0,30
ļ		Moon	lst Limb	15 40 46,35 15 46 8,07	H	Arietis	3 0 54,49 3 13 17,10
i		a Scorpii		16 19 0,73	18		3 0 52,99
į	.,	7		16 25 20,17	ll	g	3 13 15,34
1	11	7		16 18 59,27 16 25 18,69	li	Moon 2nd Limb	3 21 7.74
1		Moon	1st Limb	16 47 2,86		A¹ Tauri	3 53 37,56 4 15 7,11
I		θ Ophiuchi		17 11 34,35	19	A¹ Tauri	3 53 35,70
1	12	γ² Sagittarii		17 54 55,80		ν¹	4 14 5,41
1	12	θ Ophiuchi Moon	1st Limb	17 11 32,77 17 53 6,26		Moon 2nd Limb	4 17 43,20
1		γ• Sagittarii	ret Dimit	17 54 53,40		ν Tauri β ——	4 51 51,07 5 14 30,80
		<i>•</i> —		18 35 1,31	20	β	5 14 29,09
	13	σ ——		18 44 42,38		Moon 2nd Limb	5 15 22,79
<u> </u>	_10	' φ Sagittarii		18 35 59,71	!]	c Tauri	5 41 34,29

183	7.	Names.	Observed Transit.	1837.	Names.	Observed Transit.	
Sept.	21	C Tauri k Aurigæ Moon 2nd Limb	h. m. s. 5 41 32,93 6 3 27,21 6 13 7,87	Oct. 13 Nov. 6	Piscium γ¹ Arietis ε Capricorni	h. m. s. 1 20 46,00 1 42 35,69 21 24 42,45	
Oct.	9	Geminor.  Capricorni  Moon 1st Limb Aquarii	6 32 21,52 20 53 10,90 21 15 24,88 21 20 21,67 21 55 41,35	7	δ —— Moon 1st Limb δ Aquarii λ —— σ ——	21 34 47,74 21 57 38,79 22 18 46,53 22 40 52,00 22 18 45,02	
	10	θ θ Moon lst Limb λ Aquarii	22 6 17,27 22 6 16,07 22 18 58,34 22 42 8,91	Dec. 14	λ —— Moon 1st Limb n Piscium α <sup>2</sup> Geminor.	22 40 50,69 22 52 34,96 23 36 18,13 7 23 21,05	
	12	y' —— n Piscium r —— Moon lst Limb	23 8 31,28 23 37 34,20 23 51 36,41 0 8 33,43	16	k —— 2nd Limb  ** Cancri  **Gancri	7 33 45,12 7 51 25,51 8 16 4,23 9 8 56,45	
	13	Piscium  Piscium  Moon lst Limb	0 37 50,63 0 52 29,60 0 37 50,12 0 52 29,12 1 1 45,73		λ Leonis  Moon 2nd Limb  a Leonis  γ ——	9 21 28,49 9 34 47,61 9 58 2,27 10 10 2,15	

# OBSERVATION OF THE ECLIPSES OF JUPITER'S SATELLITES in the Years 1836 and 1837.

183	6.	Satellite.	Im. or Em.	Telescope.	Power.	Madras Mean Time.	Remarks.
Jan.	27	II	Emersion.	5 feet.	110	h. m. s. 8 10 54,3	
Feb.	1	· I	Emersion.	5 feet.	150	7 56 28,3	
	3	п	Emersion.	5 feet.	110	10 47 15,9	
	15	1	Emersion.	42 inches.	75	11 46 49,6	
	27	111	Immersion.	5 feet.	110	6 35 20,4	
	27	ш	Emersion.	5 feet.	110	9 48 27,2	
	28	l II	Emersion.	42 inches.	75	8 0 22,6	
Mar.	2	I	Emersion.	5 feet.	110	10 5 27,8	į
	5	111	Immersion.	5 feet.	110	10 32 57,9	
	6	II	Emersion.	5 feet.	110	10 33 14,3	1 [
	9	I	Emersion.	5 feet.	110	12 0 59,1	
	18	I	Emersion.	5 feet.	150	8 25 15,6	
	25	I	Emersion.	5 feet.	110	10 20 41,6	Moon near the Planet.
	29	IV	Emersion.	5 feet.	150	8 39 35,8	
	31	II	Emersion.	5 feet.	150	7 41 19,2	i
April	10	I	Emersion.	5 feet.	110	8 40 40,3	
	10	III	Emersion.	5 feet.	110	9 53 28,6	
	17	III	Immersion.	5 feet.	110	10 33 49,7	Planet low. Clear—observation satisfactory.

## ECLIPSES AND OCCULTATIONS.

1836	6.	Satellite.	Im. or Em.	Telescope.	Power.	Madras Mean Time.	Remarks.
April	17	I	Emersion.	5 feet.	110	h. m. s. 10 36 54,2	Planet low. Clear observation satisfac-
May	19	1	Emersion.	42 inches.	75	7 17 1,7	tory.
Oct.	12	11	Immersion.	5 feet.	480	15 49 2,9	
	13	111	Immersion.	42 inches.	75	14 13 5,6	
Nov.	6	11	Immersion.	42 inches.	75	12 49 10,1	1
	25	111	Immersion.	5 feet.	110	14 1 23,6	1
	25	111	Emersion.	5 feet.	110	17 32 11,7	
Dec.	1	1	Immersion.	5 feet.	110	15 47 30,0	
	5	IV	Emersion.	5 feet.	110	16 8 20,6	
	10	I	Immersion.	5 feet.	110	12 8 40,6	
	17	I	Immersion.	5 feet	110	14 2 39,6	,
	26	I	Immersion.	5 feet.	110	10 24 13,6	
1837			!			,,,,	
Jan.	9	I	Immersion.	5 feet.	110	14 9 37,3	
	11	I	Immersion.	5 feet.	60	8 38 7,8	Unsatisfactory; planet near the horizon.
Feb.	10	I	Emersion.	l 5 feet.	110	12 57 20,5	
	10	11	Emersion.	5 feet.	110	14 49 40,0	Dew rapidly deposited on the O. G.
	12	1	Emersion.	5 feet.	110	7 25 50,4	good observation.
	12	III	Emersion.	5 feet.	1 110	13 13 43,5	good observation.
	17	I	Emersion.	5 feet.	110	14 51 6,9	very good obs.
	19	I	Emersion.	42 inches.	75	9 19 35,3	The proximity of the Moon unfavorable.
	21	II	Emersion.	5 feet.	110	6 44 31,3	very good obs.
	26	I	Emersion.	5 feet.	110	11 14 2,1	good observation.
	27	IV	Emersion.	5 feet.	110	10 13 58,6	1
Mar.	7	1	Emersion.	5 feet.	110	7 36 53,9	Land chammers
	7	I	Emersion.	42 inches.	70	7 36 54,9	good observations.
	7	п	Emersion.	5 feet.	110	11 58 36,2	1
	7	II	Emersion.	42 inches.	70	11 58 41,2	good observations.
	7	I	Emersion.	5 feet.	70	9 31 24,3	good observations.
	7	ι	Emersion.	42 inches.	110	9 31 31,3	good observations.
	14	11	Emersion.	42 inches,	110	14 35 48,1	good observation.
	20	III	Emersion.	5 feet.	110	9 8 18,6	
	21	I	Emersion.	5 feet.	110	11 25 48,7	
	25	II	Emersion.	5 feet.	60	6 32 54,2	good observation.
	27	111	Emersion.	5 feet.	60	13 5 26,4	haze.
	28	I	Emersion.	5 feet.	60	13 20 21,1	haze,—planet low.
April	1	11	Emersion.	5 feet.	60	9 8 53,2	very good obs.
	6	I	Emersion.	5 feet.	60	9 43 31,4	
	18	IV	Immersion.	5 feet.	110	11 36 54,2	
	22	I	Emersion.	5 feet.	60	8 2 39,4	
	29	1	Emersion.	5 feet.	140	9 58 5,3	very good obs.

1837.		Satellite.	Im. or Em.	Telescope.	Power.	Madras Mean Time.	Remarks.
				1		h. m. s.	1
May	2	III	Emersion.	5 feet.	110	9 4 27,5	
	3	11	Emersion.	5 feet.	110	1 54 30,2	
	5	IV	Emersion.	5 feet.	110	10 22 45,2	
	9	III	Immersion.	5 feet.	110	9 31 17,1	
	15	1	Emersion.	5 feet.	100	8 15 59,4	
Dec.	16	II	Immersion.	5 feet.	60	16 24 5,3	
	17	111	Immersion.	5 feet.	110	12 47 22,4	
	17	111	Emersion.	5 feet.	110	16 12 8,2	
	29	1	Immersion.	5 feet.	110	13 25 8,3	

Occurration of Dears of the 1140018	Occultation	of	Stars	bu	the	Moon
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	Occurrence of Dears og the 1/2001.			
			<b>Iad</b>	
		Me	an '	Γime.
183 <b>6</b>		h.	m.	8.
March 23	Immersion of Tauri behind the Moon's dark limb, observed with 5 feet Achromatic power 60		6	32,7
Oct. 13	Immersion of & Scorpii behind the Moon's dark limb, observed with 5 feet Achromatic power 110at		32	41,3
15	Immersion of a star in Sagittarius behind the Moon's dark limb, observed with 42 inch, power 75		48	19,1
1837	·			
Jan. 4	Immersion of A Ophiuchi behind the Moon's enlightened limb, observed with 5 feet Achromatic power 110	17	42	39,5
March 9	Immersion of o Piscium behind the Moon's dark limb, observed with 5 feet Achromatic power 110at		<b>5</b> 9	34,3
*10	Immersion of a small star behind the Moon's dark limb, observed with 5 feet Achromatic power 110		6	37,0
+11	Immersion of a small star behind the Moon's dark limb, observed with 5 feet Achromatic power 60 at		48	15,5
April 12	Immersion of v Geminorum behind the Moon's dark limb, observed with 5 feet Achromatic power 110 at		10	19,7

#### LUNAR ECLIPSES.

Observation of the Eclipse of the Moon on the 24th October 1836.

Mean ?	
Beginning of the Eclipse         h. m.           End of the Eclipse         7 15	37,9

I was watching the approach of this star to the Moon's dark border, when my attention was arrested by the appearance of a nebulosity, about as bright as a star of the 6th magnitude,—situated upon the Moon's disc, at about 4 minutes from the unenlightened edge;—on referring to a chart of the Moon, the phenomenon evidently proceeded from the spot Aristarchus; I have frequently looked for this appearance during the early age of the Moon, but have never before seen any thing to compare with the brilliancy which I have this evening witnessed.

<sup>†</sup> The same appearance continues.

The state of the air was unfavorable for accurate observations, in consequence of which, these times are little to be depended upon. Observed with 5 feet Achromatic power 60.

Observation of the Eclipse of the Moon on the 20th April 1837.

•	M	[adr	as
	Mea	an I	ime.
	h. 1	n.	8.
Beginning of the Eclipse	11	10	50,6
Touches Grimaldus			
Covers do		13	53,1
Covers Gallilius	,	17	36,5
Covers Aristarchus		28	3,8
Touches Tycho		34	51,7
Covers do		35	46,5
Touches Plato		48	<b>56,3</b>
Covers do. ····		50	16,1
No. 28 disappeared		<b>52</b>	<b>53,7</b>
Censorinus do.		57	17,0
Proclus do.	. 12	5	53,6
Touches Mare Christium		6	45,5
Covers do. do		10	1,0
Totally Eclipsed		11	46,6
End of total darkness		49	26,7
Covers Grimaldus			13.7
Leaves do		56	17,5
Leaves Aristarchus		2	34.5
Tycho covered		18	
Leaves Tycho		19	,
End of the Eclipse		50	46.8
a ahadam maa amaadin da wall da Card and dha air mad			

The Earth's shadow was exceedingly well defined, and the air particularly clear: the times of beginning and end as well as those of contact with the various spots, are I believe, as accurate as observations of this nature will permit; but the times of "Totally Eclipsed," and "End of total darkness,"—from the rapidity with which the last thread of light was dissolved and formed, are by far the most accurate portion of the observations; these cannot I think be more than two seconds in error—

Observed with the 5 feet Achromatic with a power of 60.

Observed with the 5 feet Actionians with a power of 00.

## Observation of the Eclipse of the Moon on the 13th October 1837.

•	Madras
	Mean Time
	h. m. s.
Beginning of the Eclipse	14 52 18,6
First total Immersion in dark shadow	15 52 18,8
Last total Immersion in dark shadow	

This observation was made during my absence from Madras—by Ragavachariar, the head assistant; he states that flying clouds prevented very accurate observation—Observed with 5 feet Achromatic power 60.

Observed North Polar Distance of the Planet Mars and of Stars situated near to his path at the opposition of 1837.

		ui	the oppo		<i>y</i> 103	<i>(</i> .	
1837.	Names.	Madras Mean Time.	Bar.		ner- neter.	Observed N. P. D.	Remarks.
		11		in	out		
Jan. 26	Centrum  Leonis	h. m. 13 16,7	Inches. 30,050	71,2	66,7	71 20 27,8 71 12 6,2	
05		<u> </u>	! 	<u> </u>	<u> </u>	72 27 31,2	
27	∂ Centrum  n Leonis	13 11,4	30,066	71,0	67,0 76,0	71 8 48,5 71 12 20,8 72 27 30,3	
28	δ Centrum η Leonis	13 6,0	30,096 30,064	74,0 72,4	71,7 69,0	71 0 37,0 72 27 31,7 71 4 11,9	
29	δ Centrum η Leonis	13 0,6	30,128	75,2	73,7	70 53 16.0 70 56 6,4 72 27 30,3	,
31	δ Centrum  τ  η Leonis	12 49,6	30,110	74,8	71,0 69,8	70 39*59,4 70 35 1,3 72 27 31,7	
Feb. 2	† Centrum 7 Leonis	12 38,6	30,100	73,5	68,6	70 15 19,2 70 24 7,7 72 27 31,7	
3	* k  † Centrum  † Leonis	12 33,2	30,144 30,126 30,124	75,6 74,7 74,5	70,6 70,0 69,7	70 15 17,9 70 16 20,6 72 27 32,0	
4	& Centrum	12 27,6	30,114	75,0	73,0	70 1 16,7 70 8 38,4	
5	8 Cancri n Centrum	12 22,1	30,032	74,2	70,6	71 15 52,5 69 50 37,2	
6	d Cancri	12 16,6	30,024	74,2 74,0 74,0 73,8	71,7 70,0	70 1 5,1 71 15 52,4 69 50 36,6 69 53 39,5	
7	δ Cancri δ Centrum	12 11,1	30,07 <b>2</b> 30,06 <b>4</b>	76,0 75,8	74,3 73,7	71 15 52,6 69 46 22,1 69 41 18,0	
8	<ul><li>Cancri</li><li>1141 A. S. C.</li><li>Centrum</li></ul>	12 5,5	30,116	76,0 76,0	74,3	71 15 53,1 69 31 36,9 69 39 16,2	:
9	δ Cancri • 1141 A. S. C. δ Centrum	12 0,0	30,094 30,078	75,3 75,0	72,0 72,0	71 15 52,7 69 31 36,1 69 32 22,2	·
10	δ Cancri δ Centrum	11 54,5	30,092	77,2 76,9 76,5	75,5 75,2 74,0	71 15 51,3 69 25 39,8 69 17 24,8	
11	δ Cancri δ Centrum	11 49,0	30,012	77,5	74,6	71 15 51,2 69 19 10,2 69 17 24,6	
12	δ Cancri	<del>:</del>	29,994	78,0	76,6		
			~0,004	70,0	70,0	71 15 51,2	

Observed North Polar Distance, of Mars, &c. continued.

						er-		
1837	Names.		Madras Mean	Barometer.		neter	Observed N. P. D.	Remarks.
			Time.	Bar	in	out		
Feb. 12	3 Centrum		h. m. 11 43,5	Inches.	0	0	69 12 54,0	
		m			77,7	76,0	69 10 6,5	
13	δ Cancri  δ Centrum	1:	11 38,0	30,056	79,7	79,8	71 15 51,5 69 6 51,0	
	•	•		30,046	79,4	79,5	68 57 23,5	
14	γ Cancri δ Centrum	1	11 32,6	30,110	79,5	77,6	67 57 46,9 69 1 3,3	
<u> </u>	•	<u>i </u>			<u> </u>		68 57 26,6	
15	γ Cancri δ Centrum		11 27,1	30,130 30,120	78,2	77,0	67 57 47,4 68 55 32,6	
	•	h				l	68 47 0,0	
17	γ Cancri		1	30,160	78,2	76,2	67 57 47,8 68 40 19,4	
	3 Centrum		11 16,3			76,0	68 45 13,7	
18	γ Cancri δ Centrum		11 11,0	30,140 30,136	78,5 78,3	75,0 74,0	67 57 47,2 68 40 27,1	
19	γ Cancri & Centrum		11 5,7		<u> </u>		67 57 46,4	
	& Centrum	g	11 5,7	30,110	76,0	72,0	68 36 58,9 68 30 58,3	
20	γ Cancri & Centrum		11 0,4	30,152	76,8	72,0	67 57 48,2	
	• Centram	g	11 0,4				68 31 46,7 68 31 5,2	
21	γ Cancri & Centrum		10 55,2	30,186 30,184	78,1	75,0	67 57 47,9	
	& Centrum	f	10 33,2	50,104	77,9	76,2	68 27 49,6 68 26 20,9	
26	y Cancri	6		30,044	78,0	75,3	67 57 45,1 68 13 4,3	
( l	& Centrum		0 29,4			1	68 13 4,3 68 12 12,8	
27	γ Cancri δ Centrum	1	0 24,4	30,034	77,9	74,3	67 57 45,8 68 9 53,3	
28	γ Cancri	<u> </u>		30,078	78,2	74,8	67 57 45,4	
	d Centrum	a	10 19,5				68 13 6,6 68 7 50,4	Observed by mistake.
Mar. 1	γ Cancri	_		30,116	78,2	77,3	67 57 44,1	
	♂ Centrum	a	10 14,6				68 13 6,6 68 6 2,9	
4	γ Cancri	_ [		30,096	79,7	78,8	67 57 44,4	
	& Centrum	a	10 0,3		79,5	78,6	68 2 21,6 68 2 16,1	
5	γ Cancri	٦		30,116	80,2	77,5	67 57 43,8	
	& Centrum	a	9 55,6		•		68 2 22,1 68 1 31,1	
6	γ Cancri 3 Centrum	1	9 51,0	30,120	79,5	76,5	67 57 43,7	
	*	a	3 31,0				68 1 0,2 68 2 22,0	
7	γ Cancri			30,116	80,0	76,9	67 57 43,1	

Observed North Polar Distance, of Mars, &c. eontinued.

1837.	Names.	Madras Mean	Bar.	Th mom	er- eter.	Observed N. P. D.	Remarks.
		Time.		in	out		
Mar. 7	d Centrum	a h. m. 9 46,4	Inches.	0	0	68 0 44,3 68 2 19,3	
8	y Cancri Centrum	9 41,9	30,106	79,9	78,0	67 57 42,6 68 0 43,3 68 2 20,0	
9	γ Cancri δ Centrum	9 37,4	30,124	79,9	77,7	67 57 43,5 68 0 55,7 68 2 20,4	
10	γ Cancri δ Centrum	9 33,0	30,072	79,7	78,5	67 57 41,7 68 1 23,2 68 2 20,2	
11	γ Cancri δ Centrum	9 28,7	30,024	80,3	80,2	67 57 42,6 68 2 3,3	
12	γ Cancri δ Centrum	9 24,4	30,076	80,2	79,7	67 57 41,4 68 2 58,4	
13	γ Cancri Č Centrum	9 20,2	30,076	81,0	79,0	67 57 43,4 68 4 5,7 68 2 18,9	
14	γ Cancri δ Centrum	g 16,0	29,990	81,8	80,0 79,8	67 57 42,2 68 5 24,5 68 2 23,4	
15	γ Cancri	b 9 10,7	29,960 29,958	80,6	79,5 79,0	67 57 42,4 68 6 57,8 68 13 2,9	
16	y Cancri	b 9 7,6	30,000	80,5	79,6	67 57 43,3 68 8 40,5 68 13 4,1	
17	d Centrum	b 9 3,5	30,044	80,4	80,0	68 10 37,4 68 13 3,3	
18	y Cancri	8 59,4	30,054	80,7	78,2	67 57 42,6 68 12 45,7 68 13 2,8	
19	γ Cancri δ Centrum	8 55,5	29,998 30,010	82,3	81,8	67 57 42,3 68 15 1,2 68 13 4,2	
20	3 Centrum	8 51,6	29,990	82,0	80,0	68 17 34,1	

The above observations have been given here—out of their proper place—to enable me (without loss of time) to avail myself of the corresponding observations made at the Cape of Good Hope Observatory, with which, through the kindness of the Astronomer Royal I have just been favoured: thus, putting p', p'', &c. to represent the equatoreal horizontal parallax of the Planet Mars; and computing the values of dr, (the difference of refraction between the Planet and Star) and  $\Delta$   $\delta$ , the change of Declination in the interval occupied by the Planet in passing from one meridian to the other, we get

Observed North Polar Distance of Mars, &c.

MADRAS OBSERVATIONS.   CAPE OF GOOD HOPE OBSERVATION										
1837.	Names.	Observed diff.	dr.	P	•	Observed diff.	dr.	P	Δ	
Jan. 26	S Cent. & x Leonis S — & n —	0 8 21,6 1 7 3,4	+0,13 r - 1,12 -	-,0990 <i>p</i> -,0990	= 0 = 1		+0,21 + 1,82 -			23,5 23,5
27	δ — & ω — δ — & η —	0 3 32,3 1 15 9,5		- ,1013p <sup>1</sup> - ,1013	= 0 = 1	1 56,86 16 44,33	0,05 + 0,41 -	,7978p <sup>1</sup> ,7978	+ 1 - 1	23,5 23,5
28	δ — & P — δ — & η —	0 3 34,9 1 23 20,8	0,07 + 1,37 -	- ,1037p <sup>ii</sup> - ,1037	=0	2 2,04 24 50,02	0,06 + 0,65 —	,7992p <sup>u</sup> -,7992	+ 1 - 1	23,6 23,6
Feb. 5	3 — & n Cancri	0 10 27,9	0,17 +	-,1219p <sup>iii</sup>	=0	9 1,32	0,24 +	,8100piii	+ 1	17,0
6	δ & δ	$\begin{array}{ c c c c c c } 1 & 22 & 12,9 \\ 0 & 3 & 2,9 \end{array}$		- ,1242piv - ,1242	= 1 $= 0$	23 37,61 1 37,26	2,12 — 0,04 +	-,8114p <sup>iv</sup> -,8114	- 1 + 1	
7	∂ & ∂ ∂ & r	1 29 30,5 0 5 4,1		- ,1262p* - ,1262	$= 1 \\ = 0$	30 53,98 3 48,67	2,31 - 0,10 +	-,8128p <sup>*</sup> -,8128		13,7 13,7
8	ĉ & š	1 36 36,9	1,60 -	-,1282p*1	= 1	37 55,50	2,48 —	-,8141p <sup>rl</sup>	_ 1	11,8
9		1 43 30,5	1,71 -	- ,1302p*ii	= 1	44 48,36	2,66 –	-,8149p™	<u> </u>	9,7
11	\$ & \$ \$ & 0	1 56 41,0 0 1 45,6		-,1340p <sup>₩</sup> -,1340	= 1 =:(	57 52,81 0 0 30,61	2,93 — 0,01 +	-,8171 <i>p</i> *iii -,8171	- l + l	5,3 5,3
12	3 — & 5 — 3 — & m—	$\begin{array}{ c cccccccccccccccccccccccccccccccccc$		-,1360pix -,1360	= 2 = 0	•	3,14 - 0,04 +	-,8183pix -,8183	<del>- 1</del> + 1	3,0 3,0
14	δ — & γ — δ — & i —	1 3 16,4 0 3 36,7	1,04 +	- ,1392p* - ,1392	= l = (		1,57 <del>-</del> 0,08 +	-,8101p* -,8201		57,9 57,9
15	δ — & γ — δ — & h —	0 57 45,2 0 8 32,6	0,92 -	- ,1423p <sup>xl</sup> - ,1423		) 56 35,63 ) 7 24,60		-,8220p <sup>ni</sup>		55,4 55,4
18	δ — & γ ——	0 42 39,9		+ ,1452p=4		0 41 44,53		-,8236p*ii	+ 0	47,3
20	δ & γ δ & y	0 33 58,5	0,54	- ,1478p <sup>xiii</sup>  - ,1478		33 9,15	0,81 +	-,8251p <sup>xiii</sup> -,8251	+ 0 - 0	41,8
21	δ & γ δ & f	0 30 1,7		+ ,1490p <sup>ziv</sup> - ,1490	= 0	29 15,17	0,70 + 0,01 +	-,8258p <sup>xiv</sup>	+ 0 + 0	
28	δ & γ	0 10 5,0		- ,1547px	= (			-,8290p**		19,4
Mar. 4	δ —— & γ —— δ —— & a	0 4 37,2		- ,1561p <sup>xvl</sup> - ,1561	= (	0 4 15,89 0 0 21,09	0,11 <del>+</del> 0,00 -	-,8298p**1 -,8298	+ 0	
6	ð & a	0 1 21,8	0,02 -	-,1564p**i	-	0 1 33,53	0,03 -	-,8300p**i	- 0	3,
7	3 & γ 3 & a	0 3 1,2 0 1 35,0		- ,1 <i>5</i> 67 <i>p</i> <sup>avii</sup>  - ,1567	" = ( = (	2 52,17 0 1 44,53	0,06 + 0,04 +	,8302p**iii -,8302	+ 0	
10	δ & γ δ & a	0 3 41,5		- ,1564pxix - ,1564	= 0		0,09 + 0,02 -	,8300p <sup>xis</sup> -,8300	+++	06, 06,
12	δ & γ	0 5 17,0		⊦ ,1561p*x	= 0			,8298p**	<u> </u>	10,
13	δ — & γ — δ — & a —	0 4 22,6 0 1 46,8		+ ,1556p*** - ,1556	=(	0 6 25,31 0 1 47,64		-,8295p <sup>zzi</sup> -,8295		12,
18	δ — & γ — δ — & b —	0 15 3,1 0 0 17,1		+ ,1533p** - ,1533		0 15 18,25 0 0 8,16		+ ,8282p**i -,8282		22, 22,
19	δ & γ δ & b	0 17 18,9	0,26	+ ,1524p** + ,1524		0 17 36,01 0 2 17,09				24,

Resolving the above equations, and employing the log. distance of the Planet from the Earth—furnished in the Nautical Almanac—for the moment intermediate between the transit of the Planet over the two Observatories; we get  $\pi$ , the Equatoreal Horizontal Parallax of the Sun.

		•		•		
Jan.	26		= ,6973 $p$	p =15,61 or	=10,68	Probably another Star instead of x
		1,81	,6973 <b>p</b>			has been observed by one or the other.
	27	11,95	,6965 <b>p</b> ʻ	=17,16	=14,71	(
		10,58	,6905 <b>p</b> ¹	=15,20	=10,37	
	28	•	,6955 p <sup>u</sup>	=13,31	= 9,05	
		4,89	,69 <i>55</i> <b>p</b> <sup>u</sup>	= 7,03	= 4,78	
Feb.	5	•	,6881 p <sup>iii</sup>	=13,82	= 9,31	
	6	10,01	,6872 p <sup>iv</sup>	=14,57	= 9.82	
		10,21	,6872 p <sup>iv</sup>	=14,86	=10,02	
	7	10,67	,6866 <b>p</b> *	=15,54	=10,49	( r badly observed either at Madras
	_	1,64	,6866 p*			or the Cape.
	8	7,67	,6859 p <sup>ri</sup>	=11,18	= 7,55	•
	9	9,03	,6847 <b>p</b> ™	=13,19	= 8,92	
	11	7,46	,6831 p <sup>vii</sup>	=10,92	= 7,41	
		10,24	,6831 <b>p</b> viii	=14,99	=10,18	
	12	5,18	,6823 p <sup>ix</sup>	= 7,59	= 5,17	
		8,94	,6823 p <sup>ix</sup>	=13,10	= 9,12	
	14		,6809 p <sup>x</sup>	=11,94	= 8,17	
		6,47	,6809 p <sup>x</sup>	= 9,50	= 6,65	
	15	13,68	,6807 p <sup>xi</sup>	=20,09	=13,80	
,		12,57	,6807 p <sup>±1</sup>	=18,47	=12,68	
	18	7,71	,6784 p <sup>xil</sup>	=11,37	= 7,89	
	20	7,28	,6773 p****	=10,75	= 7,53	
		4,67	,6773 p <sup>xHI</sup>	= 6,89	= 4,83	
	21	7,36	,6768 p <sup>xlv</sup>	=10,87	= 7,66	•
		6,14	,6768 p <sup>xiv</sup>	= 9.07	= 6,39	
	28	9,53	,6743 p <sup>x</sup>	<b>≐</b> 14,13	=10,37	
Mar.	4	2,36	,6737 p <sup>xvi</sup>	=18,34	=13,85	
	_	6,86	,6737 p <sup>xvl</sup>	=10,18	= 7,69	
	6	8,01	,6736 p <sup>xvii</sup>	=11,89	= 9,11	
	7	7,82	,6735 pxviii	=11,61	= 8,96	
		8,13	,6735 p*****	=12,07	= 9,31	
	10		,6736 p <sup>xix</sup>	=12,51	= 9.89	
		6,33	,6736 <b>p</b> ***	= 9,40	= 7,42	
		10,17	,6737 p==	=15,10	=12,13	
	13	10,02	,6739 p==	=14,87	=12,04	
	••	13,71	,6739 p <sup>1</sup>	=20,35	=16,48	The Madras Obs. of $a$ is too small.
	18	,	,6749 p****	=11,20	= 9,46	mi di di di di
	10	13,86	,6749 p====	=20,54	=17,34	The Cape Obs. of $a$ is too small.
	19	, ,	,6753 p**** ,6753 p****	=11,36 = 7,09	= 9,67	The Cone Obs. of a is too la
		4,79	,U/UJ p ===	~~ /JUB	= 6,04	The Cape Obs. of $a$ is too large.

Mean	=		9,*486
Whereas fro	om a simila <mark>r s</mark> e 1832-33 we ob	ries of observations at the tained for $\pi$	he } 9,912
Do.	Do.	1834-35	8 ,595
Giving to e	ach series the luatoreal Hor.	same weight, we obtain Pa. of the Sun, or $\pi =$	$=$ ${}$ ${}$ 9 ,331

## OBSERVATIONS OF THE FIXED STARS.

THE observations of the Fixed Stars in 1836 & 1837 have been principally confined to a Catalogue of 2070 Stars, which, with those given in Vols. II. & III. completes the re-observation of Piazzi's Catalogue. It was my intention in 1836 to have made four observations of each Star at each Instrument—two in the first year, and two in the second, whereby any error in the observation or reduction would readily be detected;—this plan has for the most part been accomplished,—the principal deviation therefrom being in the hours XX & XXI, where, having to encounter a large number of Stars (from 140-150 in each hour) and that too at a time of the year little favorable to Observation,—I have been unable to make more than two or three, and in some cases only one observation of each Star; but, taking in to account, the accuracy to which each single observation may lay claim, I have thought it proper, rather to give this single observation, than to omit the Star from the Catalogue. The Magnitudes are from the mean of all the observations at both instruments, save that in the case where half a magnitude had to be decided between the two instruments, I have given it in favour of the Transit, as being derived from the better instrument of the two. and from the most skilful observers. The Corrections which have been employed, are those resulting from the values of a, b, c, d, of the Catalogue, in conjunction with the values of A, B, C, D, given in the Nautical Almanac; —these values of a, b, c, &c. have been computed for the year 1840, by applying to the A.R. and Declination given in Piazzi's Catalogue—the amount of 40 times the annual precession there given, whereby the places for 1840. are for this purpose obtained to a sufficient degree of accuracy. The formulæ employed (which has been explained at full length by Mr. Bailly in the appendix to the second volume of the Memoirs of the Royal Astronomical Society), is as follows

```
a = + \cos a \cdot \sec \delta
b = + \sin a \cdot \sec \delta
c = + 46^{\circ}024 + 20^{\circ},042 \sin a \cdot \tan \delta
d = + \cos a \cdot \tan \delta
a' = + \tan \omega \cdot \cos \delta - \sin a \cdot \sin \delta
b' = + \cos a \cdot \sin
c' = + 20^{\circ},042 \cos a \cdot \sin
d' = - \sin a \cdot \cos \delta - \sin a \cdot \cos \delta
```

and the values of A, B, C, D from the Nautical Almanac are computed from the formulæ

```
A = -18'',6768 cos. \odot

B = -20'',3600 sin. \odot

C = t - 0'',02495 sin. 2 \odot -0,34362 sin. \Omega + 0,00413 sin. 2 \Omega -0,004 sin. 2 C

D = -0'',54470 cos, 2 \odot -9'',25000 cos. \Omega + 0'',09030 cos. 2 \Omega -0'',090 cos. 2 C

from which we deduce

Apparent A. R. in arc. = a + A a + B b + C c + D d.

Apparent Declination = \delta + A a' + B b' + C c' + D d'.
```

where t denotes the time from the beginning of the year, a represents the A. R. of the Star, t its Declination, and the Obliquity of the ecliptic. To guard against mistakes, the computations of these values as well as the places for 1840—have all been performed in duplicate, thus;—when the first computation had once been completed, the resulting values properly arranged—where neatly registered in a book which it was intended should be eventually employed in the ulterior computations, and the said book together with the details of the computation carefully locked up;—the computation was now again gone over anew, the results carefully compared with those registered in the fair book, and the discrepancies set right by a re-examination of each of the original computations; when the error, if occurring in the first computation, was rectified by neatly erasing the erroneous figures in the fair book: in the examination of the press, the proof sheet has always been compared with this original document, by which means, errors (with the exception of those given in the errata) have I hope been completely avoided.

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## SUBSIDIARY CATALOGUE (No. 2.)

OF

## THE FIXED STARS

REDUCED TO JANUARY 1, 1836.

Together with the values of a, b, c, d, &c.

COMPUTED FOR THE WEAR 1840.

&c.

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Freces-		Logari	hms of	
		•	Obs.	Jan. 1, 1836.	sion.	и	ь	С	d
1	Andromedæ	7.8	6	h. m. s. 0 1 59,87	+3,074	+8,8770	+6,8593	+0,4877	
2	Ceti	9	4	2 0,62	3 065	,8346	6,8169	,4864 ,4867	
3 4	θ App. Sculp.	<i>var</i> 6.7	3	2 46,05 3 23,29	3,067 3,053	,8 <b>250</b> ,9161	6,9323 7,1122		
5	Andromedæ	7.8	4	3 33,71	3,079	,8768	7,0887	,4884	+8,5443
6	Ceti	8	3	4 49,44		+8,8262	+7,1651		<b>-7,8551</b>
7	App. Sculp.	8	4	4 57,00	3,044	,9316	,2818	,4834	
8	Andromedæ	8 8.9	3	6 0,77 6 32,75	3,098 3,073	,9403 ,8279	,3727 ,2960		+8,7496 +7,9669
9 10	Piscium Andromedæ	7.8	3	6 36,65	3,091	,8891	,3615	,4901	
11	Andromedæ	7.8	4	6 41,20	3,087	+8,8715	+7,348 <b>2</b>	+0,4895	  +8,5195
12	Piscium	7.8	3	6 54,17	3,063		,3161	,4861	<b>-7,9149</b>
13		7.8	3	7 39,51	3,073	8,8271	,3629	,4876	
14 15	App. Sculp. Cassiopeæ	7 7	3	7 50,73 8 11,76	3,039 3,155	8,8968 9,1333		,4827 ,4990	-8,6250 +9,0736
16	Piscium	7.8	3	8 15,33	3,068	1	+7,3914	+0,4869	+7,0508
17	Ceti	8.9	3	8 45,62	3,056	,8347	,4258	,4861	-8,1846
18		7	3	9 13,15	3,049	,8504	,4636	,4842	<b>—8,3830</b>
19 20	Piscium Ceti	7.8 7.8	3	9 25,13 9 54,90	3,066 3,065	,8240 ,8240	,4464 ,4699	,4866 ,4864	
21 22	Andromedæ Piscium	7.8 8	2 3	10 5,17 10 <b>2</b> 6,72	3,103 3,055	+8,8887	+7,5431 ,5009	+0,4918 4850	-8,1447
23	Phænicis	6	3	10 31,34	3,008		,6382	,4783	
24	Andromedæ	8	3	10 51,34	3,099	,8681	,5523	,4912	+8,5032
25	Ceti	7.8	6	11 49,96	3,051	,8363	,5581	,4844	<b>8,2185</b>
26	Andromedæ	7.8	3	12 58,07		+8,9226	+7,6834	+0,4950	
27 28	App. Sculp. Ceti	7.8 8	3	13 2,91 13 17,17	3,010 3,044	8,9190 8,84 <b>2</b> 8	,6821 ,6124	,4786 ,4834	-8,6953 -8,3112
29	App. Sculp.	8	3	13 34,70	3,033	8,8620	,6422	,4819	
30	Cassiopeæ	8	4	13 56,90				,5076	+9,0856
31	Cassiopeæ	9	3	14 21,76		+9,1434	+7,9462	+0,5083	+9,0871
32	Ceti	7	4	14 45,09	3,044	8,8420	,6566	,4834	-8,3038
33 34	App. Sculp. Andromedæ	7 7.8	3 4	14 59,55 16 4,11	3,013 3,124	8,8941 8,8874	,7164 ,7393	,4790 ,4947	8,6173 +8,5927
35	Ceti	8	4	16 30,44	3,046	8,8333	,6975	,4837	-8,1721
36	Ceti	8	4	16 35,97	3,039	+8,8419	+7,7079	+0,4827	
37		7.8	3	17 32,13	3,051	,8283	,7177	,4844	-8,0336
38	Piscium	7	3	17 32,56	3,104	,8476	,7371	,4919	+8,3661
39 40	Ceti	7.8 7	3	18 29,52 18 43,59	3,117 3,057	,8622 ,8247	,7756 ,7427	<b>,4</b> 937 <b>,4</b> 853	+8,4741 -7,8355
41	Piscium	7.8	4	18 55,65	3,071	+8,8226	+7.7453	+0,4873	+7,3507
42	Ceti	7.8	3	19 41,07	3,042	,8328	,7718	,4832	<b>8,1698</b>
43	Andromedæ	7	3	20 15,53	3,153	,9143	,8663	,4987	+8,6837
44 45	Ceti	8 7	4	20 51,69	3,041	,8325	,7972	,4830	-8,1672
70		•	ا	21 6,72	3,059	,8233	,7934	,4856	<b>7,7032</b>

No.	No.		Annual Preces-		Logai	rithms of		zi No.	Annua	l P. M.
	Obs		sion.	a'	b'	e'	d'	Piazzi	A. R.	Decn.
1 2 3 4 5	4 4 3 4 4	+27 44 25,21 -12 41 52,32 - 4 13 59,77 -36 3 4,44 +27 41 53,98	+20,042 20,042 20,041 20,041 20,041	+9,5798 +9,6284 +9,6375 +9,5563 +9,5753		,3019 ,3019 ,3019	-7,98 <b>2</b> 2 7,98 <b>2</b> 2 <b>8,1072</b> 8,1961 8,2119	2 3 4 7 8	s. +,015 +,017 +,007 +,020 +,012	- ,12 - ,01 + ,01 + ,15 - ,13
6 7 8 9 10	4 3 2 3 3	- 6 9 13,33 -38 44 3,78 +40 7 4,84 + 7 54 23,98 +30 37 25,13	20,038 20,038 20,036 20,035 20,035	+9,6345 +9,5478 +9,4983 +9,6294 +9,5539	-9,0286 -9,7961 +9,8091 +9,1388 +9,7072	,3019 ,3018 ,3019	-8,3387 ,3502 ,4322 ,4680 ,4723	10 JJ 13 17 18	+,004 +,010 +,010 +,008 +,020	- ,03 + ,11 - ,14 - ,06 - ,08
11 12 13 14 15	3 3 3 3 3	+26 22 22,46 - 7 2 51,22 + 7 12 18,30 -32 21 26,50 +60 37 18,21	20,035 20,034 20,032 20,031 20,030	+9,5752 +9,6385 +9,6307 +9,5866 +9,2577	+9,6478 -9,0877 +9,0988 -9,7279 +9,9400	+1,3018 ,3018 ,3017 ,3017 ,3017	8,4765 ,4890 ,5355 ,5464 ,5640	19 21 22 23 25	+,011 +,016 +,007 +,018 +,019	,00 + ,01 - ,03 + ,02
16 17 18 19 20	3 4 4 4 3	+ 0 56 18,68 -12 57 5,65 -19 57 49,75 - 2 46 26,43 - 2 55 31,96	20,030 20,028 20,026 20,026 20,024	+9,6355 +9,6253 +9,6385	+8,2268 9,3496 9,5323 8,6807 8,7037	+1,3017 ,3016 ,3016 ,3016 ,3015	8,5674 ,5907 ,6128 ,6219 ,6454	26 29 31 34 36	+,014 +,016 +,001 +,005 +,011	+ ,01 + ,07 - ,09 - ,05 + ,02
21 22 23 24 25	$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$	+30 36 20,98 —11 51 33,80 —44 8 49,42 +25 32 34,73 —13 58 21,54	20,022 20,022 20,020	+9,6385 +9,5378 +9,5682	+9,7067 -9,3114 -9,8422 +9,6345 -9,3815	+1,3015 ,3015 ,3015 ,3015 ,3014	8,6539 ,6677 ,6704 ,6837 ,7212	38 39 40 41 44	+,016 +,017 +,004 +,011 +,007	+ ,03 + ,04 - ,02 + ,18 - ,01
26 27 28 29 30	3	+37 16 39,25 -36 42 27,21 -17 7 3,92 -23 54 45,33 +61 19 55,73	20,010 20,009 20,007	+9,5832  - +9,6355  - +9,6 <b>24</b> 3  -	+9,7817 -9,7755 -9,4677 -9,6065 +9,9424	+1,3012 ,3012 ,3012 ,3012 ,3011	-8,7601 ,7623 ,7688 ,7794 ,7898	47 48 49 51 52	+,014 -,001 +,014 +,028 +,032	- ,01 - ,00 - ,03 - ,10 + ,10
31 32 33 34 35	4 4 4	+61 24 14,33 -16 51 14,31 31 56 45,67 +30 27 47,36 12 37 8,62	20,001 19,998 19,993	+9,6375  - +9,6 <b>0</b> 53  - +9,5289  -	+9,9427 -9,4609 -9,7222 +9,6985 -9,3376	+1,3011 ,3010 ,3010 ,3009 ,3008	-8,8019 ,8137 ,8213 ,8507 ,8630	56 57 59	+,015 +,009 ,000 +,011 +,003	,00 + ,01 ,04 ,08 + ,06
36 37 38 39 40	4 4	-16 56 15,66 - 9 15 36,46 +19 14 13,97 +24 8 4,01 - 5 54 42,26	19,983 19,983 19,976	+9,6444  - +9,5843  - +9,5599  -	- 9,4627 -9,2040 +9,5172 +9,6104 -9,0093	+1,3008 ,3007 ,3007 ,3005 ,3005	-8,8647 ,8882 ,8882 ,9119 ,9165	67 66 71	+,014 +,006	- ,06 + ,01 ,09 ,04 ,11
41 42 43 44 45	3 4	+ 1 54 22,70 -12 33 57.32 +35 59 32,66 -12 30 22,15 - 4 22 39,17	19,967   - 19,964   - 19,958   -	+9,6464  - +9,4757  - +9,6474  -	+8,5266 -9.3354 +9,7677 -9,3329 -8,8781	+1,3004 ,3003 ,3002 ,3001 ,8001	-8,9211 ,9374 ,9503 ,9628 ,9682	78 80 82	+,006 +,005 +,016	- ,04 ,00 + ,04 + ,06 - ,07

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
			Obs.	Jan. 1, 1836.	sion.	a	ь	c	d
46 47 48 49 50	App. Sculp. Piscium Andromedæ App. Sculp. Ceti	7,8 7.8 7 7	2 3 3 4 3	h. m. s. 0 21 20,45 21 26,76 22 24,83 22 26,26 22 41,20	s. +2,957 3,085 3,191 2,950 3,042	+8,9479 ,8261 ,9580 ,9496 ,8297	+7,9221 ,8017 ,9546 ,9462 ,8302		+ 7,9652 + 8,7992
51 52 53 54 55	Piscium Ceti Andromedæ Cassiopeæ	7 7.8 7.8 7 8	3 2 2 3 2	23 5,04 23 23,97 23 49,50 24 11, 24 22,73	3,105 3,078 3,020 3,142 3,313	+8,8370 8,8226 8,8461 8,8731 9,1181	7,8698 7,9 <b>02</b> 0	,4883 ,4800 ,4972	+7,6626
56 57 58 59 60	Ceti Piscium ————————————————————————————————————	7.8 8 8 8 7	2 1 4 2 3	24 50,04 25 5,98 25 14,09 26 4,55 26 24,01	3,056 3,064 3,078 3,343 3,276	+8,8228 8,8214 8,8223 9,1352 9,0447		,4863 ,4883	7,7393 7,2345 +7,6731 +9,0771 +8,9489
61 62 63 64 65	Andromedse Piscium Andromedse Piscium Andromedse	8 · 8 · 8	3 4 9 2 3	26 46,98 26 59,84 27 32,67 28 35,42 28 35,56	3,139 3,099 3,137 3,056 3,183	,8217	7,9053 7,9421	,4912 ,4965 ,4851	+8,4739 +8,1081 +8,4517 -7,6949 +8,6579
66 67 68 69 70	Ceti Piscium ————————————————————————————————————	9. 7 7.8 7.8 7	4 3 4 3 2	29 36,47 30 29,72 30 39,48 31 8,57 31 27,65	3,047 3,090 3,075 3,102 3,029	,8233 ,8203 ,8274	+7,9399 7,9524 7,9513 7,9659 7,9726	,4900 ,4878 ,4916	7,9020  +7,9112  +7,4110  +8,0941  8,1478
71 72 73 74 75	Piscium ————————————————————————————————————	7.8 8 7.8 8 7.8	3 4 2 3	32 22,04 33 0,75 33 4,60 33 19,42 34 7,56	3,138 3,109 3,135 2,992 2,875	,8497	+8,0029 7,9931 8,0092 8,0180 8,1409	,4926 ,4962 ,4760	+8,3841 +8,1497 +8,3628 -8,4076 -8,8039
76 77 78 79 80	Ceti Piscium Ceti Cassiopeæ Andromedæ	7 7.8 7.8 7.8 7.8	3 2 3 3	35 34,77 36 44,55 36 44,67 36 54,97 37 3,80	3,021 3,066 3,018 3,369 3,170	+8,8297 8,8183 8,8295 9,0535 8,8659	+8,0261 ,0293 ,0406 ,2669 ,0769	+0,4801 ,4866 ,4797 ,5275 ,5011	6,8502
81 82 83 84 85	Phœnicis Ceti Andromed. pr		2 3 4 2 4	37 11,24 37 29,82 37 37,22 37 40,23 39 0,11	2,862 3,000 3,195 3,195 3,176	+8,9579 ,8381 ,8807 ,8808 ,8617	+8,1745 ,0578 ,1020 ,1028 ,0991	,4771 ,5045 ,5045	8,7961 8,3110 +8,5806 +8,5808 +8,4944
86 87 88 89 90	Piscium Ceti	7.8- 8 9 6	3 3 3 4	39 33,78 40 10,57 41 4,89 41 11,42 41 27,06	3,040 3,142 3,098 3,006 3,081	+8,8205 ,8376 ,8202 ,8307 ,8217	+ 8;0645 ,0883 ,0803 ,0923 ,0862		

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	ms of	-	zi No.	Annual	P. M.
			sion.	a'	b'	c'	ď	Piazzi	A. R.	Decn.
46 47 48 49 50	3 4 2 3 3	-41 34 20,66 + 7 53 52,85 +23 2 23,45 -41 50 49,72 -10 59 27,68	" + 19,955 19,955 19,952 19,952 19,943	+9,5877 +9,6201 +9,3979 +9,5899 +9,6484	9,8198 +9,1371 +9,8321 9,8220 9,2771	+1,3001 ,3000 ,2998 ,2998 ,2998	8,9723 ,9736 ,9945 ,9945 ,9983	84 85 93 94 96	s. +,000 +,015 +,001 +,006 +,015	+ ,04 - ,09 - ,01 + ,10 - ,02
51 52 53 54 55	2 3 3 2 1	+15 6 54,09 + 3 56 25,89 -19 7 36,65 +27 22 27,75 +59 38 29,27	19,940 19,936 19,935 19,930 19,928	+9,5933 +9,6294 +9,6474 +9,5263 +9,1038	+9,4145 +8,8376 -9,5124 +9,6605 +9,9335	+1,2997 ,2996 , <b>2</b> 995 , <b>2</b> 995 , <b>2</b> 995	9,0070 ,0119 ,0204 ,0264 ,0299	97 98 100 103 104	+,006 ,000 +,010 +,011	- ,22 -, 02 + ,01 + ,02 - ,16
56 57 58 59 60	3 3 2 2 2 3	- 4 45 16,82 - 1 30 47,72 + 4 2 29,76 +60 57 36,55 +53 17 53,82	19,924 19,922 19,920 19,912 19,909	+9,6444 +9,6405 +9,6284 +9,0414 +9,2201	8,9139 8,4104 +8,8481 +9,9389 +9,9012	+1,2994 ,2993 ,2993 ,2991 ,2990	9, <b>0</b> 38 <b>0</b> ,0415 ,0437 ,0563 ,06 <b>3</b> 7	106 107 108 112 114	+,016 +,013 +,002 +,004 +,018	,14 ,02 + ,07 + ,06 ,02
61 62 63 64 65	3 2 2 3 3	+24 12 2,07 +10 56 30,52 +23 7 17,18 -4 18 13,79 +34 29 42,83	19, <b>90</b> 5 19,902 19,897 19,88 <b>5</b> 19,885	+9,5416 +9,6053 +9,5465 +9,6454 +9,4564	+9,6099 +9,2762 +9,5914 -8,8698 +9,7499	+1,2989 ,2989 ,2988 ,2985 ,2985	9,0702 ,0734 ,0818 ,0981 ,0981	116 119 121 129 128	+,016 ,000 +,019 +,010 +,010	,14 ,10 ,00 ,04 ,03
66 67 68 69 70	3 3 3 3 3	- 6 54 4,71 + 7 0 50,19 + 2 13 4,23 +10 37 49,08 -12 2 52,18	19,874 19,864 19,862 19,856 19,852	+9,6503 +9,6180 +9,6325 +9,6031 +9,6561	9,0749 +9,0840 +8,5868 +9,2626 9,3143	+1,2983 ,2981 ,2980 ,2979 ,2978	-9,1128 ,1252 ,1271 ,1345 ,1390	132 135 137 140 142	+,011 +,007 +,059 +,018 +,013	- ,01 - ,01 + ,22 - ,08 - ,16
71 72 73 74 75	3 3 3 3	+20 7 7,31 +12 3 44,55 +19 14 19,66 -21 12 2,56 -44 1 29,35	19,841 19,834 19,833 19,829 19,819	+9,5539 +9,5955 +9,5587 +9,6609 +9, <b>6</b> 191	+9,53 <b>2</b> 7 +9,3163 +9,5139 —9,5533 —9,8369	+1,2976 ,2974 ,2974 ,2973 ,2971	,1603	145 149 150 151 153	-,006 +,013 +,018 +,010 +,007	,13 ,09 ,07 + ,04 ,20
76 77 78 79 80	4 4 2 1 3	-12 54 4,00 - 0 38 37,26 -13 2 26,12 +54 24 25,45 +25 16 28,19	19,800 19,784 19,783 19,781 19,779	+9,6609 +9,6395 +9,6618 +9,0828 +9,5092	9,3429 8,0263 9,3469 +9,9046 +9,6250	+1,2967 ,2963 ,2963 ,2962 ,2962	,2077	161 167 169 168 170	-,007 +,027 +,016 +,023 +,018	- ,15 - ,16 + ,14 - ,02 - ,09
81 82 83 84 85	4 3 3 4	-43 34 12,61 -17 19 20,44 +30 2 48,14 +30 3 13,96 +25 23 37,00	19,771	+9,6304 +9,6656 +9,4683 +9,4669 +9,5038	-9,8324 -9,4670 +9,6939 +9,6941 +9,6263	+1,2962 ,2961 ,2960 ,2960 ,2956	,2138 ,2153	173 174 175 176 184	-,001 +,017 +,015 +,020 +,022	,08 ,02 ,18 ,18 ,12
86 87 88 89 90	3 4 3 3 4	- 6 53 17,20 +17 25 8,32 + 7 3 35,88 -14 27 7,79 - 8 44 39,36		+9,6551 +9,5587 +9,6117 +9,6674 +9,6590	-9,0710 +9 4702 +9,0839 -9,3895 -9,1733	+1;2954 ,2952 ,2949 ,2948 ,2947	,2439	188 191 197 198 200	+,003 -,004 +,016 +,019 +,009	+ ,01 + ,08 - ,01 - ,09 - ,02

No.	Star's name and	Mag.	No. Obs.	Right Ascension Jan. 1, 1836.	Annual Preces-		Logari	hms of	
				1, 10001	3.01.	а	ь	с	d
91 92 93 94 95	Piscium Phœnicis Piscium	8 7.8 8 7.8 7.8	3 2 3 4 3	h. m. s. 0 42 1,22 42 22,07 42 25,47 42 34,95 43 0,31	s. +3,139 2,827 3,099 3,094 3,121	+8,8339 ,9614 ,8198 ,8187 ,8256	+8,1040 ,2357 ,0940 ,0950 '1061	,4513 ,4512	+ 8,2773 8,8052 + 7,9168 + 7,8403 + 8,1405
96 97 98 99 100	Piscium ————————————————————————————————————	8 8.9 8.9 8.9	4 3 3 3 3	44 48,76 44 51,99 44 53,40 45 29,76 45 30,06	3,154 3,151 3,083 3,091 2,998	+8,8378 ,8361 ,8161 ,8168 ,8299	,1354		+8,3332 +8,3151 +7,5652 +7,7528 -8,2372
101 102 103 104 105	Andromedæ Cassiopeæ Piscium Cassiopeæ Andromedæ	8 7.8 8 7.8 7.8	3 4 4 3 2	46 23,00 47 53,12 47 55,89 48 27,89 48 45,72	3,180 3,417 3,201 3,419 3,175	+8,8494 9,0188 8,8586 9,0177 8,8426	+8,1637 ,3475 ,1874 ,3513 ,1793	,5336 ,5053 ,5339	+ 8,4332 + 8,9116 + 8,4921 + 8,9098 + 8,3893
106 107 108 109 110	Piscium Andromedæ Piscium	8.9 7 8 8	3 2 3 4 4	48 49,56 49 16,21 49 18,79 49 35,60 49 53,60	3,070 3,254 3,125 3,176 3,126	+8,8139 ,8905 ,8220 ,8421 ,8219	,2315	,51 <b>24</b> ,4948	+6,7548 +8,6276 +8,1097 +8,3871 +8,1127
111 112 113 114 115	Messoris Piscium	8.9 8 7 8 8	3 3 2 3 3	50 44,93 50 59,65 51 43,88 52 39,98 52 41,21	3,531 3,068 3,179 3,124 3,106	+9,0828 8,8129 8,8407 8,8193 8,8156	,1705 , <b>20</b> 35	,4869 ,5 <b>0</b> 21 , <b>4</b> 947	+9,0089  -5,9756  +8,3827  +8,0724  +7,9117
116 117 118 119 120	Piscium  Cassiopeæ Piscium seq.	8 8 8.9 7 6.7	2 4 3 3 2	52 46,92 55 17,01 55 18,53 56 39,72 56 54,90	3,128 3,101 3,103 3,710 3,192	+ 8,8 <b>20</b> 3 8,8133 8,8131 9,1521 8,8390	,2063 ,2141 ,5558	,4915 ,4918 ,5694	+8,1029 +7,8253 +7,8453 +9,1017 +8,3853
121 122 123 124 125	Piscium seq. Ceti Piscium Ceti	8 8 8.9 7.8 8	3 3 1 3	57 22,75 57 27,74 58 13,80 58 21,96 59 48,01	3,091 3, <b>2</b> 00 3,005 3,186 3,123	+8,8111 ,8419 ,8171 ,8346 ,8143	,2519 ,2329	,4778	+8,4095 -8,0825
126 127 128 129 130	Phœnicis Piscium ————————————————————————————————————	7.8 7.8 8 7.8	2 4 3 3 3	1 0 17,67 0 32,65 0 35,25 2 4,28 2 19,24	2,751 3,210 3,207 3,809 3,123	+8,9398 8,8415 8,8404 9,1681 8,8126	+8,3714 ,2750 ,2745 ,6136 ,2595	,5065 ,5061 ,5808	+8,4160 +8,4086 +9,1223
131 132 133 134 135	Piscium App. Sculp. Piscium	8 7 8 7.8 8	3 3 3 3	2 50,60 3 58,63 5 9,51 5 11,68 5 38,53	3,215 3,274 2,795 3,112 3,193	+8,8397 ,8657 ,8983 ,8090 ,8283	,3247 ,3653 ,2764	+0,5072 ,5151 ,4464 ,4930 ,5042	+8,5543 8,6681 +7,8770

No.	No.	Declination	Annual Preces-		Logari	thms of		zi No.	Annua	P. M.
	Obs.		sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
91 92 93 94 95	4 2 4 4 3	+16 5 53,93 -44 17 24,07 + 7 9 13,47 + 6 0 19,43 +11 53 33,44	" +19,704 19,697 19,697 19,695 19,688	+9,5635 +9,6434 +9,6107 +9,6159 +9,5866	+9,0140	+1,2946 ,2944 ,2944 ,2943 ,2942	-9,2627 ,2667 ,2667 ,2687 ,2727	202 205 204 206 208	+,008 +,006 +,010 -,001 +,016	- ,04 - ,00 - ,01 - ,02 + ,03
96 97 98 99 100	4 4 3 4 3	+18 12 9,66 +17 30 8,69 + 3 11 43,38 + 4 54 55,71 -14 48 48,49	19,658 19,657 19,657 19,647 19,647	+9,5453 +9,5502 +9,6253 +9,6180 +9,6730		+1,2935 ,2935 ,2935 ,2933 ,2933	—9,2902 ,2909 ,2909 , <b>2</b> 965 ,2965	214 215 216 218 219	+,005 +,003 +,015 +,007 +,014	+ ,03 - ,01 - ,11 - ,19 - ,12
101 102 103 104 105	2 1 3 3 3	+22 31 25,79 +51 21 4,28 +25 26 59,64 +51 14 56,75 +20 35 55,94	19,631 19,603 19,603 19,593 19,587	+9,4800 +9,0334	+9,5747 +9,8831 +9,6238 +9,8823 +9,5367	+1,2929 ,2923 ,2923 ,2921 ,2920	9,3052 ,3191 ,3191 ,3238 ,3267	224 233 236 237 239	+,028 +,012 +,013 +,021 +,026	+ ,06 + ,03 - ,06 + ,04 - ,10
106 107 108 109 110	2 2 2 4 2	+ 0 28 28,19 +33 3 53,69 +11 9 12,34 +20 30 59,30 +11 14 28,09	19,587 19,578 19,577 19,572 19,566	+9,5185	+7,9308 +9,7269 +9,2775 +9,5347 +9,2804	+1,2920 ,2918 ,2917 ,2916 ,2915	—9,3267 ,3307 ,3313 ,3336 ,3365	240 242 244 245 247	+,001 +,008 +,004 +,008 -,003	- ,21 - ,17 - ,02 - ,04 - ,03
111 112 113 114 115	2 3 2 3 3	+57 28 40,80 - 0 6 15,81 +20 21 46,77 +10 17 44,36 + 7 9 0,42	19,549 19,542 19,531 19,512 19,511	+9,6375 +9,5172 +9,5866	+9,9152 -7,1517 +9,5307 +9,2414 +9,0844	+1,2911 ,2910 ,2907 ,2903 ,2903	—9,3438 ,3466 ,3515 ,3591 ,3597	248 251 253 255 256	+,022 +,005 +,010 +,012 +,004	+ ,03 - ,32 - ,06 - ,15 - ,07
116 117 118 119 120	3 4 4 2 2	+11 1 38,48 + 5 52 59,12 + 6 10 11,51 +62 53 32,75 +20 35 8,29	19,510 19,458 19,436 19,430 19,424	+9,6096 +9,6074 -8,3222	+9,2708 +8,9991 +9,0189 +9,9360 +9,5327	+1,2902 ,2891 ,2886 ,2885 ,2883	-9,3602 ,3801 ,3877 ,3902 ,3922	257 269 271 272 276	+,011 +,007 +,021 +,014 +,005	+ ,02 - ,03 - ,04 - ,05 - ,06
121 122 123 124 125	3 4 4 3	+ 4 2 3,91 +21 40 17,07 -10 38 +19 16 17,29 + 9 1 48,53	19,412 19,396 19,392	+9,4928   +9,6749   +9,5145	+8,8351 +9,5537 -9,2511 +9,5045 +9,1817	+1,2881 ,2881 ,2877 ,2876 ,2869	-9,3957 ,3961 ,4015 ,4030 ,4130	281 282 288 289 297	-,003 +,019 +,005 +,011	- ,12 + ,07 - ,08 - ,08
126 127 128 129 130	4 3 2 3 3	-42 21 57,64 +22 1 52,60 +21 42 8,32 +64 8 6,49 + 8 40 42,65	19,344 19,342	+9,4829 +9,4857 -8,7243	-9,8130 +9,5591 +9,5527 +9,9379 +9,1634	+ 1,2867 ,2865 ,2865 ,2857 ,2856	-9,4163 ,4181 ,4186 ,4292 ,4305	303 302 304 312 4	-,005 +,005 +,024 +,011 +,010	- ,15 + ,11 - ,04 - ,05 + ,24
131 132 133 134 135	3 2 3	+21 50 59,81 +29 11 32,53 -36 4 38,72 + 6 42 35,10 +18 15 21,86		+9,3874 +9,7126 +9,5999	+9,5544 +9,6712 -9,7518 +9,0501 +9,4787	+1,2853 ,2847 ,2841 ,2840 ,2838	-9,4341 ,4417 ,4490 ,4495 ,4525	7 11 18 17 21	+,006 +,014 +,019 +,019 +,017	+ ,03 ,12 ,06 + ,04 + ,03

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-			hms of	
·			Obs.	Jan. 1, 1836.	sion.	ч	ь	с	d
100	<b>O</b> -4:	0	_	h, m. s. 6 7,20	s.	1 0 0106	1 0 0045	10 4794	7 0026
136 137	Ceti Piscium	8 7.8	3		+3,009 3 109	+8,8106 8,8074	+8,2845	+0,4784	<b>—7,</b> 993 <b>6</b> +7 <b>,</b> 8338
138	Cassiopess	7.0	2	7 1,88 7 16,32	3,660	9,0661	,5483	,5635	+8,9887
139	Piscium	8	2	8 50,72	3,094	8,8049	,2970	,4905	+7,6300
140	Cassiopes	7.8	3	9 36,27	3,694	9,0714	,5692	,5675	+8,9967
141	Cassiopeæ	8	5	10 12,78	3,890	+9,1587	+8,6600	+0,5899	  +9,1117
142	Piscium	7.8	5	10 23,42	3,095	8,8039	,3066	,4907	
143		8	3	10 25,28	3,115	,8058	,3085	,4935	+7,8652
144		8	4	11 0,63	3,116	,8055	,3121	,4936	+7,8693
145	-	7.8	3	11 13,83	3,106	,8043	,3126	,4922	+7,7712
146	Andromede	8	3	12 14,31	3,505	+8,9635	+8,4784	+0,5447	+8,8236
147	Piscium	7.8	4	13 53,26	3,101	,8021	,3274	,4915	+7,6886
148	Andromedæ	7.8	4	14 45,84	3,459	,9313	,4621	,5389	+ 8,7595
149	Phœnicis	8	4	15 10,24	2,645	,9464	,4793	,4224	-8,7917
150	Piscium	7.8	3	15 19,55	3,102	,8012	,3353	,4916	+7,6926
151	Andromedæ	7	2	16 50,20	3,362		+8,4222	+0,5266	
152	Phœnicis	6.7	3	17 34,06	2,618	,9516	,4992		-8,8037
153	Persei	8	2	17 36,73	3,617	,9992	,5475	,5583	+8,8895
154	Piscium!	8	3	19 52,19	3,125		,3617	,4948	+7,8943
155		7	4	20 22,16	3,277	,8373	,4019	,5155	+ 8,4542
156	Cassiopeæ	7.8	4	20 31,48	4,282	+9,2457	+8,8111	+0,6324	+ 9,2164
157	Piscium	. 8	4	21 13,42	3,351	8,8645	,4338	,5252	+8,5810
158	Andromedæ	7.8	4	24 49,98	3,425	8,8877		,5347	+8,6612
159 160	100 <sup>2</sup> Piscium	7.8 7.8	3	26 10,91	3,170	8,8015	,3991	,5011	+8,1097
100	-	7.0	4	26 17,15	3,132	8,7959	,3939	,4958	+7,9087
161	Andromedæ	8	4	26 48,08	3,609	,-	+8,5634	+0,5574	+8,8297
162	Disasion	7	4	27 42,41	3,616		,5683	,5582	+8,8306
163 164	Piscium App, Sculp.	7.8 8.9	3	28 57,94 29 27,64	3,169 2,822	,7986	,4112 ,4506	,5009	+8,089
165	103 Piscium	7.8	4	30 25,77	3,214	,8356 ,8058		,4506 ,5070	-8,4748 +8,2413
166		7	1 7		!	ì		1	1
166 167	Cassiopeas Piscium	7.8	7 4	31 35,96 32 10,48			+8,7127 ,4601	+0,09/8	+9,0219
168	Phonicis	8	3	32 27,38	2,653	8,8301 8,8925		,5201 ,4237	+8,4550 -8,6846
169	Piscium	8	3	32 47,76	3,145			,4976	+7,9494
170	Cassiopeæ	8.9	2	32 53,30	3,969		,7168	,5987	+9,0189
171	Ceti	7.8	2	33, 22,88	2,848	  +8,8251	+8,4573	+0,4545	-8,4046
172	Andromedse	8	3	33 34,44	3,697	8,9766		,5678	
173	Arietis	8.9	3	35 56,52	3,256			,5127	
174	Camelop.	7.8	3	36 18,16	6,577	9,5971	9,2484	,8180	+9,5919
175	Pisciuni	7.8	4	38 27,66		8,7890	8,4511	,5006	+8,0301
176	Trianguli	7	4	39, 19,07	3,417	+8,8525	+8,5189	+0,5336	+ 8,5751
177	Arietis	8	4	39 28,67		8,7991		,5095	+8,2451
178	Persei	8	3	39 49,54	3,858	9,0163		,5864	+ 8,926
179	Fornacis	8	4	41 1,16	2,776	8,8304	,5053	,4434	-8,4882
180	x Ceti præ,	7	4	41 20,16	2,952	8,7886	,4648	,4701	8,0883

No.	No. Obs.	Declination	Annual Preces-		Logari	thms of		zi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
136 137 138 139 140	3 3 4 2	- 8 47 35,27 + 6 5 13,03 + 56 45 52,91 + 3 47 53,16 + 57 20 37,10	" +19,210 19,187 19,180 19,142 19,119	+9,6739 +9,6021 -7,6990 +9,6159 -8,2787	-9,1646 +9,0074 +9,9034 +8,8051 +9,9048	+1,2835 ,2830 ,2828 ,2820 ,2815	-9,4555 ,4614 ,4630 ,4721 ,4773	22 28 27 34 35	+,021 +,015 -,010 +,016 +,006	+ ,33 - ,05 + ,07 - ,05 + ,02
141 142 143 144 145	3 4 4 4 4	+63 48 33,40 + 3 47 19,45 + 6 33 56,93 + 6 37 37,19 + 5 17 48,94	19,103 19,100 19,100 19,084 19,076	-8,9031 +9,6159 +9,5977 +9,5977 +9,6064	+9,9322 +8,8004 +9,0384 +9,0424 +8,9454	+1,2811 ,2810 ,2810 ,2807 ,2805	-9,4805 ,4817 ,4817 ,4853 ,4869	39 42 43 45 46	+,077 +,011 +,019 +,022 +,013	- ,01 - ,07 + ,02 - ,00 - ,07
146 147 148 149 150	4 4 4 4	+46 25 15,83 + 4 23 30,12 +42 17 2,66 -44 27 49,99 + 4 27 4,63	19,050 19,004 18,980 18,970 18,964	+9,7292	+9,8380 +8,8634 +9,8045 -9,8214 +8,8674	+1,2799 ,2788 ,2783 ,2781 ,2779	9,4927 ,5022 ,5071 ,5089 ,5101	49 54 61 65 64	+,020 +,007 +,006 +,024 +,013	+ ,11 ,11 + ,03 + ,02 ,07
151 152 153 154 155	4 3 4 3 5	+33 43 39,18 -45 23 6,12 +50 57 17,48 + 7 6 25,19 +24 25 25,33	18,923 18,901 18,897 18,833 18,816	+8,1461   +9,5899	+9,7197 -9,8266 +9,8647 +9,0670 +9,5895	+1,2770 ,2765 ,2764 ,2749 ,2745	—9,5181 ,5221 ,5228 ,5344 ,5372	70 78 71 87 90	+,038 ,000 +,005 +,009 +,013	- ,12 - ,04 ,00 + ,02 - ,02
156 157 158 159 160	4 3 4 8 4	+69 10 15,07 +31 20 20,36 +36 23 38,96 +11 43 1,83 + 7 25 57,36	18,812 18,793 18,678 18,638 18,633	+9,1271 +9,5428	+9,9432 +9,6884 +9,7429 +9,2766 +9,0811	+1,2744 ,2740 ,2713 ,2703 ,2703	—9,5378 ,5413 ,5595 ,5660 ,6663	86 93 104 112 114	+,025 +,012 +,007 +,012 +,005	- ,02 + ,09 + ,07 - ,04 - ,04
161 162 163 164 165	4 4 4 4	+47 28 29,98 +47 34 22,85 +11 14 25,10 -25 51 16,96 +15 47 27,61	18,615 18,587 18,547 18,531 18,497	+8,2304 +9,5465 +9,7459	+9,8355 +9,8355 +9,2572 -9,6052 +9,4006	+1,2698 ,2692 ,2683 ,2679 ,2671	—9,5692 ,5733 ,5788 ,5810 ,5856	115 121 128 134 135	+,013 +,029 +,027 +,028 +,006	- ,03 + ,05 + ,02 - ,02 - ,06
166 167 168 169 170	2 3 3 4 3	+59 42 53,84 +24 54 49,94 -38 18 20,43 + 8 14 25,08 +59 36 20,65	18,455 18,434 18,427 18,417 18,411	+9,3598 +9,7672 +9,5705	+9,9005 +9,5886 -9,7556 +9,1209 +9,8989	+1,2661 ,2657 ,2655 ,2652 ,2651	—9,5913 ,5937 ,5948 ,5963 ,5969	139 145 147 149 146	+,031 +,011 +,008 +,006 +,032	- ,09 - ,09 + ,17 + ,01 - ,05
171 172 173 174 175	2 2 5 3 4	-22 33 3,45 +49 46 56,58 +19 1 49,21 +81 8 31,49 +10 1 14,93	18,395 18,388 18,305 18,291 18,214	+9,4425	-9,5462 +9,8455 +9,4744 +9,9551 +9,1995	+1,2647 ,2645 ,2626 ,2622 ,2604	9,5989 ,5998 ,6099 ,6116 ,6205	153 152 161 155 169	+,019 +,027 +,006 +,137 +,009	- ,08 - ,20 - ,01 + ,06 + ,15
176 177 178 179 180	3 4 4 4 4	+31 51 24,39 +16 12 1,83 +54 23 53,76 -27 4 22,80 -11 31 2,54	18,183 18,178 18,163 18,118 18,108	+9,4757 -8,9590	+9,6803 +9,4036 +9,8674 -9,6139 -9,2556	+1,2597 ,2595 ,2592 ,2581 ,2579	-9,6240 ,6246 ,6262 ,6311 ,6321	171 174 173 180 182	-,010 +,001 +,020 +,005	+ ,36 + ,08 - ,06 + ,02 - ,06

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	thms of	
				Jan. 1, 1836.	sion.	а	ь	С	d
181.	Piscium	9	2	h. m. s. 1 43 8,76	s. +3,102	+8,7789	+8,4641	+0,4916	+7,5434
182	Ceti	8	4	43 20,57	3,171	8,7846	8,4709	,5012	+8,0250
183	MESARTHIM	8	2	44 32,60	3,265	8,8000	8,4917		+8,3018
184	Cassiopeæ	7.8	4	45 32,67	5,315 3,703	9,3676 8,9345	9,0644 8,6417	,7255 ,5685	+9,3529  +8,7938
185	Andromedæ	7.8	4	47 45,29	0,700		,	,0000	~ 0,7000
186	Ceti	8	5	51 36,77	3,135	+8,7726			+7,8025
187	Piscium	8	4	51 50,53	3,108	8,7706			+7,5705
188	Cassiopese	8 7.8	3	52 54,97 53 13,16	4,345 3,147	9,1209 8,7718	,85 <b>2</b> 0 , <b>50</b> 38	,6380 ,4979	+9,0731   + 7,8638
189 1 <b>90</b>	Ceti Andromedæ	7.8	2	53 52,61	3,634	8,8937	,6288		+8,7156
			1			1	1	İ	1 0 4001
191	Arietis	7.8	4	55 4,63	3,370	+8,8098		+0,5276	+8,4381 $-7,7171$
192 193	Ceti	8 8	2 5	55 11,12 58 56,85	3,010 3,162	,7667	,5 <b>0</b> 91 ,5244	,5000	+7,9147
194	Persei	8.9	4	59 5,80	3,969	,9885	,7470	,5987	+8,8940
195	Ceti	8	8	59 38,64	3,163	,7660	,5266		+7,9140
196	62 Ceti	8	4	2 0 51,73	3,032	+8,7609	+8,5270	+0,4817	<b>-7,4939</b>
197	Arietis	8	2	2 11,79	3,324	,7875	,5594	,5217	
198		8	4	3 48,61	3,306	,7814	,5605	,5193	+8,2955
199	66 Ceti præ.	var.	4	4 24,63	3,030	,7569			<b>-7,4969</b>
200	-	8	3	4 30,79	3,111	,7570	,5388	,4929	+7,5467
201	Persei	7.8	3	5 22,59	4,111	+9,0108	+8,7964		+8,9308
202	Ceti	7	3	5 25,43	3,022	8,7561	,5417		<b>-7,5756</b>
203	Persei	7.8	5	5 27,52	4,113 3,847	9,01 <b>0</b> 6 8,9301	,7968 ,7180	,6142 ,5851	+8,9306 +8,8021
204 205	Andromedæ Persei	8 8.9	2 4	5 54,30 6 2,12	4,156	9,0214	,8098	,6187	+8,9463
						. 0.7540	1.0.5.400	1 . 0 4004	
206	Ceti	7.8	3	6 10,72 7 37,01	3,079 4,133	9,0093	+8,5433	+0,4884 ,6163	+6,9662 +8,9298
207 208	Persei Trianguli	7 8	4	7 55,24	3,445	8,8062	,6026	,5372	+8,4778
209	Trianguit	8	3	7 55,59	3,445	8,8062	,6026	,5372	+8,4778
210	Ceti	7.8	3	8 0,26	3,086	8,7522	,5489	,4894	+7,1702
211	Ceti	8	2	8 33,10	3,023	+8,7523	+8,5512	+0,4804	<b>—7,556</b> 2
212		9	3	8 44,04	3,125	,7526	,5523	,4948	+7,6584
213	Eridani	7.8	4	8 46,63	2,431	,8788	,6788	,3858	<b>-8,7028</b>
214	Ceti	7.8	2	8 47,98	2,977 3,021	,7547 ,7491	,5547 ,5592		
215		11	1	11 11,67	3,021 	,,,,,,,,,	,0092	,4801	<b> 7,</b> 5589
216	Andromedæ	7.8	4	12 49,25	3,699	+8,8669	+8,6833		+8,6817
217	Ceti	8	4	12 51,69	3,158 3,020	,7494	,5664		+7,8364
218		9.10 8.9	3	13 20,79 13 21,08	3,020	7464	,565 <b>6</b> ,56 <b>4</b> 5		-7,5562 $-7,0223$
219 220		7.8	4	13 23,69	3,071	,7455	,5646	,4873	
	m.· M·-	70	4	15 56,06	3,485	+8,8012	+8,6307	+0,5422	+8 <b>,4</b> 890
221 222	Tri. Min. Ceti	7.8 8.9	4	16 43,66	3,067	,7413	,5741	,4867	<del></del> 5,9040
223	Persei	8	4	16 51,71	4.026	,9501	,7837		+8,8456
224	Arietis	7.8	3	16 55,02	3,198	,7474	,5810	,5049	+7,9776
225		7	3	17 23,15	3,201	,7470	,5825	,5053	+7,9838
			1	1			<u> </u>	1	<u> </u>

No.	No.	Declination	Annual Preces-		Logarith	ims of		zi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
181 182 183 184 185	4 4 2 4 4	+ 3 18 51,23 + 9 59 44,00 +18 29 32,36 +75 8 52,66 +46 17 30,49	" +18,040 18,033 17,987 17,945 17,859	+9,6107 +9,5453 +9,4330 -9,5051 -8,4472	+8,7187 +9,1944 +9,4548 +9,9373 +9,8091	+1,2562 ,2560 ,2549 ,2539 ,2518	-9,6395 ,6403 ,6447 ,6488 ,6570	189 191 196 195 207	8. +,005 +,011 +,007 +,037 +,005	,00 -,22 +,15 -,07 +,09
186 187 188 189 190	4 4 4 4 2	+ 6 7 15,70 + 3 35 27,02 +63 35 33,51 + 7 4 18,39 +41 32 26,69	17,647 17,639	+9,5821 +9,6053 9,3655 +9,5705 +7,9031	+8,9761 +8,7458 +9,8969 +9,0365 +9,7657	+1,2481 ,2478 ,2467 ,2465 ,2458	9,6709 ,6718 ,6759 ,6766 ,6789	227 228 230 234 237	+,008 ,000 +,009 +,021 +,017	+ ,05 + ,03 + ,06 - ,08 - ,08
191 192 193 194 195	3 4 4 4 5	+25 7 40,17 - 5 7 25,14 + 8 3 40,93 +53 32 56,16 + 8 4 6,01	17,556 17,396	+9,2742 +9,6767 +9,5563 -9,1523 +9,5563	+9,5710 -8,8914 +9,0865 +9'8438 +9,0858	+1,2446 ,2445 ,2404 ,2402 ,2397	9,6830 ,6835 ,6961 ,6968 ,6983	245 246 258 255 261	+,014 +,018 +,014 +,035 +,011	- ,17 - ,07 ,00 - ,14 - ,10
196 197 198 199 200	4 4 4 4	- 3 6 35,54 +20 36 2,97 +19 2 52,21 - 3 9 55,97 + 3 30 49,38	17,177 17,154	+9,6628 +9,3560 +9,3838 +9,6637 +9,6031	8,6694 +9,4815 +9,4471 8,6723 +8,7220	+1, <b>2</b> 383 ,2368 ,2350 ,2343 ,2342	9,7024 ,7067 ,7120 ,7137 ,7141	265 1 12 17 19	+,001 +,031 +,007 +,028 +,009	- ,02 + ,02 - ,08 - ,08 - ,02
201 202 303 204 205	2 3 4 4 2	+56 15 42,10 - 3 48 4,41 +56 17 17,27 +48 6 40,02 +57 15 19,79	17,108 17,102 17,084	—9,2833 +9,6693 -9,2856 —8,9956 —9,3117	+9,8512 -8,7507 +9,8511 +9,8026 +9,8553	+1,2332 ,2332 ,2330 ,2326 ,2324	-9,7168 ,7168 ,7173 ,7185 ,7189	21 26 22 25 24	+,013 +,013 +,014 +,017 +,002	+ ,03 + ,05 + ,11 - ,01 + ,03
206 207 208 209 210	4 3 3 4 3	+ <b>0</b> 54 31,15 +56 22 23,96 +27 59 2,02 +27 59 2,42 + 1 28 26,94	17,074 17,005 16,992 16,994 16,988	+9,6284 -9,3032 +9,1271 +9,1271 +9,6232	+8,1422 +9,8491 +9,5999 +9,5999 +8,3461	+1,2323 ,2305 ,2302 ,2302 ,2301	—9,7193 ,7238 ,7246 ,7246 ,7248	31 35 38 39 40	+,014 +,002 +,028 +,019 +,009	- ,05 + ,10 + ,29 - ,09 + ,07
211 212 213 214 215	2 4 3 2 6	- 3 40 6,08 + 4 35 41,79 -41 50 7,81 - 7 20 31,50 - 3 43 28,35	16,954 16,951	+9,6693 +9,5911 +9,8319 +9,6972 +9,6702	8,7314 + 8,8330 9,7512 9,0322 8,7341	+1,2295 ,2293 ,9292 ,2292 ,2263	9,7264 ,7270 ,7272 ,7272 ,7343	44 45 50 48 57	+,009 +,019 ,009 ,004	+ ,03 - ,12 + ,03 + ,03 - ,17
216 217 218 219 220	4 4 4 4	+40 43 38,09 + 6 59 54,75 - 3 42 47,68 - 1 6 14,24 + 0 12 55,87	16,732 16,734	-8,4624 +9,5611 +9,6712 +9,6474 +9,6355	+9,7372 +9,0092 -8,7314 -8,1983 +7,5315	+1,2244 ,2242 ,2236 ,2237 ,2236	—9,7388 ,7392 ,7407 ,7405 ,7407	62 63 67 66 68	+,040 +,002 +,001 +,008 +,007	- ,01 + ,07 + ,07 - ,14 - ,13
221 222 223 224 225	4 4 4 4 4	+29 8 8,31 - 0 6 32,94 +51 48 26,73 + 9 45 35,00 + 9 54 15,81		+9,0253 +9,6385 -9,2430 +9,5211 +9,5185	+9,6062 -7,0801 +9,8127 +9,1474 +9,1533	+1,2204 ,2193 ,2191 ,2191 ,2185	,7507	74 81 78 82 83	+,014 +,016 +,010 +,016 +,008	,05 ,21 + ,08 ,17 ,34

No.	Star's name and	Mag.	No. Obs.	A:		gois	Annual Preces-		Logarit	thms of	
<u> </u>				Jan.	. 1,	1836.	sion.	u	b	С	d
226 227 228	Trianguli Persei	8 10 8	5 3 4	h. 2	19	35,21 8,74 12,35	*. +3,492 3,490 3,592	+8,7977 ,7962 ,8152	+8,6380 ,6387 ,6704	+ 0,5431 ,5428 ,5553	+8,4813
229 230	Ceti Trianguli	9 8	5 3		24	20,50 55,43	3,154 3,605	,7337 ,8104	,5971 ,6801	,4989 ,3569	+7,7706 +8,5582
231 232 233	Persei Ceti Arietis	8 8.9 8	4 3 4		28	6,64 18,64 53,16	4,016 3,010 3,234	,7282 ,7335	+8,7918 ,6032 ,6151	+0,6038 ,4786 ,5097	+8,8000 -7,5894 +8,0357
234 235 236	Persei Ceti Ceti	7.8 9 7.8	4 4 3		31	18,26 22,25 30,10	3,397 2,887 3,146	, ·	,7891 ,6226 +8,6169	,6017 ,4604 +0,4978	+8,7828 -8,0644 +7,6936
237 238 239 240	Trianguli Ceti ——— Persei	8 9 8.9 8.9	3 4 5 4		34 35 35	53,84 20,11 55,89 41,90	3,528 3,099 3,141 4,108	,7730 ,7154 ,7158 ,9129	,6780 ,6220 ,6247 ,8251	,5475 ,4912 ,4971 ,6136	+8,4556 +7,2863 +7,6547 +8,8027
241 242 243 244 245	Ceti Persei Ceti Arietis Persei	7 9 7.8 7.8 8	3 2 2 4 4		37 37	45,46 42,10 36,96 58,72 4,84	3,128 4,029 3,141 3,243 4,149	+8,7140 ,8903 ,7132 ,7200 ,9162	+8,6260 ,8061 ,6286 ,6368 ,8374	+0,4953 ,6052 ,4971 ,5109 ,6179	+7,5612 +8,7649 +7,7462 +8,0233 +8,8104
246 247 248 249 250	Fornacis Persei Fornacis ————————————————————————————————————	8.9 8.9 9 8.9 9	5 4 4 5 4		40 42 42	24,31 32,07 26,54 29,59 26,56	2,395 4,154 2,503 2,536 2,920	+8,8108 ,9131 ,7805 ,7729 ,7049	+8,7369 ,8399 ,7143 ,7070 ,6505	+0,3793 ,6185 ,3985 ,4041 ,4654	8,6003 +8,8068 8,5168 8,4906 7,9225
251 252 253 254 255	Cassiopeæ Persei  24S — 6 Eridani seq	7 8.9 7.8 7.8 6	4 1 5 3 5		49	52,90 14,60 49,97 1,56 3,30	4,651 4,210 3,760 3,715 2,277	+ 9,0059 8,9003 8,7919 8,7785 8,8096	+8,9570 ,8605 ,7543 ,7454 ,7800	+0,6675 ,6243 ,5752 ,5700 ,3574	
256 257 258 259 260	Eridani Arietis Persei	7.8 8 8.9 7.8 7.8	4 5 5 3 4	3	0	52,35 2,02 28,51 0,76 2,73	2,470 3,273 3,351 4,110 4,112	+8,7633 ,6829 ,6907 ,8392 ,8398	+8,7370 ,6839 ,6932 ,8481 ,8486	+0,3927 ,5150 ,5252 ,6138 ,6140	-8,5011  +8,0090  +8,1479
261 262 263 264 265	Camelop. Eridani Tauri	7.8 6.7 8.9 8.9 7.8	4 5 5 4 3		4 5 7	15,12 55,68 22,36 57,73 27,84	5,132 2,517 3,625 3,366 3,398		+9,0550 8,7444 8,7460 8,7078 8,7157	+0,7103 ,4009 ,5593 ,5271 ,5312	-8,4208 +8,4231 +8,1422
266 267 268 269 270	Arietis Persei Camelop. Persei	8 8.9 8.9 8.9	4 5 1 5 1		15 16 17	52,37 58,19 25,61 44,81 19,07	3,440 4,232 4,211 4,510 4,176	+8,6730 ,8237 ,8180 ,8759 ,8047	+8,7267 ,8856 ,8816 ,9444 ,8755	+0,5366 ,6265 ,6244 ,6542 ,6208	+8,7019 +8,6924 +8,7883

No.	No.	Declination	Annual Preces-		Logari	thms of		zi No.	Annual	P. M.
110,	Obs.	Jan. 1, 1836.	sion.	a'	<i>b'</i>	c'	d'	Piazzi	A. R.	Decn.
226 227 228 229 230	4 2 4 3 4	+29 7 59,73 +28 56 54,30 +33 56 53,69 + 6 13 47,29 +34 0 13,33	+16,477 16,45 <b>2</b> 16,295 16,188 16,140	+9,0086 9,0128 8,5401 9,5647 8,4314	+9,6026 9,5994 9,6572 8,9441 9,6527	+1,2169 ,2162 ,2120 ,2092 ,2070	-9,7553 ,7568 ,7652 ,7706 ,7747	89 92 103 111 117	+,017 +,008 +,030 +,035	-0,02 -,04 ,00 +,11 -,08
231	4	+49 46 22,00	16,039	-9,2504	+9,7861	+1,2052	-9,7779	119	+,007	- ,17
232	4	- 4 10 43,13	16,032	+3,6785	-8,7644	,2051	,7781	127	,016	+ ,04
233	4	+11 33 12,77	15,948	+9,4829	+9,2028	,20 <b>2</b> 7	,7823	134	,024	+ ,04
234	2	+48 50 51,86	15,926	-9,2355	+9,7770	,2021	,7833	133	,024	+ ,02
235	4	-12 27 34,61	15,819	+9,7451	-9,2302	,1991	,7884	145	,013	,00
236	4	+ 5 21 49,08	15,754	+9,57 <b>2</b> 9	+8,8677	+1,1974	9,7911	151	+,002	- ,06
237	5	+28 45 47,06	15,625	+8,8921	9,5744	,1938	,7968	160	,007	- ,04
238	2	+ 2 7 2,94	15,602	+9,6138	8,4621	,1932	,7978	163	,006	- ,05
239	4	+ 4 57 30,15	15,569	+9,5775	8,8291	,1923	,7992	165	,016	- ,17
240	4	+50 51 30,43	15,525	-9,33 <b>6</b> 5	9,7787	,1909	,8013	169	,004	+ ,04
241	2	+ 4 1 0,01	15,525	+9,5899	+8,7362	+1,1910	—9,8010	171	+,016	,04
242	2	+48 29 35,28	15,470	-9,2765	9,7621	,1895	,8034	172	,013	,08
243	4	+ 4 53 55,45	15,481	+9,5775	8,8207	,1897	,8030	174	,023	,23
244	3	+11 34 9,04	15,459	+9,4728	9,1904	,1891	,8040	177	,019	+ ,01
245	4	+51 35 50,55	15,391	-9,3674	9,7796	,1873	,8066	180	,006	+ ,17
246	4	-38 2 6,63	15,320	+9,8686	-9,6728	+1,1853	—9,8094	187	+,025	+ ,01
247	5	+61 31 6,60	15,309	9,3711	+ ,7767	,1849	,8099	184	,021	+ ,09
248	4	-33 3 46,08	15,207	+9,8567	- ,6164	,1820	,8139	196	,007	+ ,24
249	4	-31 29 54,32	15,203	+9,8513	- ,5976	,1819	,8140	197	,004	+ ,04
250	5	- 9 31 23,11	15,030	+9,7300	- ,0926	,1770	,8205	209	,004	- ,07
251	6	+60 37 31,65	14,947	9,5658	+9,8128	+1,1745	—9,8237	211	+,012	+ ,09
252	2	+51 41 40,02	14,805	9,4150	+ ,7633	,1704	,8287	222	,006	+ ,10
253	4	+37 28 25,27	14,772	8,8261	+ ,6520	,1695	,8298	223	,006	- ,05
254	4	+35 27 38,65	14,702	8,6232	+ ,6292	,1674	,8323	227	+,002	- ,17
255	4	-40 57 52,78	14,647	+9,8893	- ,6803	,1657	,8342	239	,007	+ ,04
256	4	-33 9 47,92	14,595	+9,8681	-9,6001	+1,1642	—9,8359	243	,000	- ,02
257	4	+12 13 37,17	14,157	+9,4377	+ ,1751	,1509	,8500	263	+,013	- ,08
258	4	+16 37 56,72	14,132	+9,3284	+ ,3054	,1502	,8507	266	,010	- ,02
259	3	+47 29 17,27	14,032	-9,3674	+ ,7126	,1470	,8539	268	,000	- ,14
260	4	+47 33 15,82	14,032	-9,3692	+ ,7131	,1470	,8539	269	,008	- ,02
261	2	+65 2 26,76	13,948	-9,6702	+9,8001	+1,1445	—9,8562	1	+,001	- ,07
262	4	-29 46 56,94	13,852	+9,8669	,5354	,1415	,8590	10	,010	- ,09
263	4	+29 56 23,31	13,822	+8.1461	+ ,5369	,1406	,8598	9	,001	- ,10
264	4	+16 57 55,28	13,657	+9,3032	+ ,2989	,1353	,8645	21	+,015	+ ,06
265	6	+18 28 32,25	13,498	+9,2480	+ ,3298	,1303	,8688	33	,012	+ ,08
266	4	+20 22 43,16	13,278	+9,1643	+9,3633	+1,1231	—9,8747	46	+,008	- ,16
267	2	+49 1 10,61	13,132	-9,4579	,6945	,1183	,8782	52	-,002	+ ,01
268	1	+48 28 57,05	13,101	-9,4456	,6898	,1173	,8790	53	+,008	- ,09
269	4	+54 47 57,10	13,017	-9,5694	,7249	,1145	,8810	58	+,005	+ ,10
270	2	+47 24 13,98	12,977	-9,4265	,6783	,1132	,8820	61	+,023	+ ,10

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	hms of	
				Jan. 1, 1836.	sion.	а	ь	с	d
271 272 273 274 275	Persei Tauri	8 9 9 9	4 3 4 4 5	h. m. s. 3 21 45,95 22 21,73 25 55,73 26 51,97 26 56,38	s. +4,190 3,508 3,415 3,368 3,440	+8,7967 ,6623 ,6404 ,6326 ,6409	+8,8809 ,7485 ,7404 ,7361 ,7450	+0,6222 ,5451 ,5334 ,5274 ,5366	+8,6637 + ,5260 + ,1389 + ,0716 + ,1651
276 277 278 279 280	Persei Fornacis Tauri Persei	8 9 8 8	4 2 5 4 5	26 58,17 32 15,75 32 38,12 33 19,65 33 48,12	3,689 2,487 3,506 3,391 4,226	+8,6803 ,6587 ,6348 ,6184 ,7656	+8,7844 ,7831 ,7601 ,7473 ,8966	+0,5669 ,3957 ,5448 ,5303 ,6259	+8,3871 ,3380 + ,2134 + ,0785 + ,6307
281 282 283 284 285	Tauri Persei Pleiadum ————————————————————————————————————	8 9 8 8 7.8	4 4 3 3 4	34 6,78 35 10,40 35 42,84 35 53,30 38 19,22	3,463 4,229 3,521 3,545 4,946	+8,6250 ,7617 ,6283 ,6315 ,8852	+8,7571 ,8981 ,7668 ,7708 9,0346	+0,5394 ,6262 ,5467 ,5496 ,6942	+8,1632 ,6265 ,2148 ,2379 ,8220
286 287 288 289 290	Pleiadum Persei Pleiadum Eridani Pleiadum	7.8 8 8 8 7.8	4 5 7 4 4	40 0,34 40 49,96 41 36,49 42 13,69 42 23,94	3,537 4,403 3,575 2,961 3,575	+8,6186 ,7765 ,6190 ,5780 ,6168	,9359	,6437 ,5533	+8,2144 +8,6643 +8,2398 -8,5648 +7,2376
291 292 293 294 295	f' Eridani Cephei Tauri Eridani Persei	8 6.7 9 8.9 8	4 4 4 3 1	42 32,88 42 59,07 45 16,09 47 2,39 49 10,71	2,203 9,506 3,405 2,962 3,997	+8,6793 9,3440 8,5864 8,5643 8,6686		,5321	8,4698 +9,3377 +8,0490 7,5419 +8,4726
296 297 298 299 300	Persei Tauri ——— Eridani	8 8.9 8.9 8.9	4 3 5 4 3	50 15,12 51 5,27 51 7,91 52 35,47 53 58,88	4,002 3,478 3,478 3,526 3,027	+ 8,6660 ,5769 ,5770 ,5784 ,5419	,7784 ,7784 ,7860	,5 <b>41</b> 3 , <b>547</b> 3	+8,4727 +8,1096 +8,1100 +8,1517 -7,1024
301 302 303 304 305	Horologii Eridani ——— Tauri Eridani	9 8 8 8.9 8.9	4 4 3 4	53 58,93 54 45,89 54 47,74 55 39,91 55 42,61	1,953 3,120 3,120 3,521 2,435	+8,6876 ,5393 ,5394 ,5678 ,5942	,7563	+0,2907 ,4941 ,4941 ,5467 ,3865	8,5322 +7,2016 +7,2204 +8,1342 8,2793
306 307 308 309 310	Persei Tauri	9 7.8 7.8 9 8.9	2 4 5 3	56 36,35 56 39,77 56 41,23 57 59 26,79	4,426 3,954 3,655 3,655 3,418		+8,9478 ,8594 ,8085 ,8089 ,7802	+0,6459 ,5970 ,5629 ,5629 ,5338	+8,6056 ,4201 ,2415 ,2397 ,0057
311 312 313 314 315	Camelop. Eridani Tauri	8.9 8 9.10 8 8.9	4 4 4 4 4	4 1 29,28 1 38,26 1 59,83 2 38,57 3 45,82	4,674 4,457 2,619 3,106 3,290	+8,7487 ,7090 ,5460 ,5138 ,5168	+8,9952 ,9561 ,7940 ,7647 ,7734	+0,6697 ,6490 ,4181 ,4922 ,5172	+8,5937 -8,1030 +7,0343

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarit	hms of		zzi No.	Annual	Р. М.
			sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
271 272 273 274 <b>2</b> 75	4 3 5 4 4	+47 23 17,48 +23 4 58,17 +18 21 6,18 +15 55 47,37 +19 31 8,68	+12,745 12,713 12,468 12,404 12,400	-9,4377 +8,9823 +9,2175 +9,3032 +9,1643	+9,6703 ,3958 ,2923 ,2306 ,3155	+1,1053 ,1041 ,0958 ,0936 ,0932	-9,8875 ,8*83 ,8937 ,8951 ,8953	74 78 90 92 93	s. +,022 +,012 +,016 -,005 +,011	+0,05 -,10 +,04 -,26 -,14
276 277 278 279 280	3 4 4 4 3	+30 34 35,44 -28 33 26,52 +22 15 32,51 +16 45 44,79 +47 8 13,34	12,394 12,034 12,002 11,955 11,917	8,4150 +9,8825 +8,9956 +9,2648 9,4683	+9,4980 - ,4578 + ,3558 ,2357 ,6394	+1,0932 ,0804 ,0792 ,0775 ,0762	9,8953 ,9029 ,9036 ,9045 ,9053	91 117 115 120 119	+,009 +,023 +,018 -,004 +,004	- ,02 + ,05 + ,01 + ,06 + ,02
281 282 283 284 285	4 4 4 3 2	+20 11 24,01 +47 5 5,84 +22 41 9,22 +23 49 0,90 +59 49 40,56	11,898 11,824 11,786 11,773 11,592	+9,1106 -9,4728 +8,9445 +8,8451 -9,6875	+9,3117 ,6356 ,3559 ,3753 ,6990	+1,0755 ,0727 ,0714 ,0708 ,0641	9,9056 ,9071 ,9079 ,9081 ,9116	124 127 133 135 148	+,014 ,018 ,005 ,014 ,011	- ,15 + ,23 - ,01 ,00 - ,07
286 287 288 289 290	3 5 4 3 4	+23 12 24,40 +50 32 59,61 +24 39 37,36 - 5 34 44,80 +24 40 14,06	11,482 11,415 11,367 11,323 11,303	+8,8808 -9,5551 +8,6902 +9,7093 +8,6902	+9,3538 +9,6433 +9,3742 8,7388 +9,3720	+1,0600 ,0576 ,0555 ,0540 ,0532	—9,9136 ,9149 ,9168 ,9165 ,9169	163 167 175 181 179	+,013 ,015 ,011 ,016 ,027	+ ,05 ,04 ,05 ,11 ,13
291 292 293 294 295	4 2 5 4	-38 7 +80 13 44,89 +16 51 14,10 - 5 27 53,34 +39 32 17,55	11,304 11,242 11,102 10,975 10,808	+9,9299 -9,8710 +9,2380 +9,7093 -9,3032	-9,5417 +9,7425 +9,2060 -8,7160 +9,5358	+1,0532 ,0508 ,0454 ,0404 ,0338	9,9169 ,9180 ,9204 ,9226 ,9254	182 160 192 200 204	+,016 -,021 +,015 -,001 +,008	+ ,03 + ,01 - ,59 - ,07
296 297 298 299 300	5 2 6 3 5	+39 37 30,21 +19 55 5,22 +19 56 33,29 +21 57 37,22 - 2 5 40,71	10,730 10,671 10,671 10,562 10,463	9,3096 +9,0755 +9,0755 +8,9243 +9,6674	+9,5334 +9,2589 +9,2592 +9,2950 -8,2782	+1,0306 ,0282 ,0282 ,0237 ,0196	—9,9267 ,9276 ,9276 ,9294 ,9309	207 211 212 219 225	+,007 ,012 ,017 ,007 ,011	,15 + ,54 ,02 + ,04 ,18
301 302 303 304 305	4 4 4 4 5	-44 23 6,78 + 2 37 1,45 + 2 43 38,73 +21 36 23,13 -28 59 19,20	10,467 10,398 10,398 10,332 10,337	+9,9571 9,5955 9,5933 8,9395 9,9 <b>0</b> 04	9,5625 + 8,3772 + 8,3960 + 9,2786 9,3974	+1,0198 ,0169 ,0169 ,0142 ,0142	—9,9308 ,9319 ,9319 ,9329 ,9329	230 231 233 237 241	+,014 ,007 ,009 ,023 ,011	+ ,07 + ,03 - ,07 + ,07 - ,05
306 307 308 309 310	1 4 2 6 4	+49 45 7,24 +37 38 7,84 +27 4 20,96 +27 3 52,19 +16 51 5,65	10,258 10,253 10,253 10,218 10,047	9,5752 9,2577 7,6990 7,6990 +9,2148	+9,5918 ,4948 ,3672 ,3654 ,1627	+1,0117 ,0108 ,0108 ,0094 ,0020	9,9340 ,9341 ,9341 ,9346 ,9372	239 242 244 246 250	+,019 +,022 -,004 +,019	- ,14 - ,23 + ,08 - ,01 - ,04
311 312 313 314 315	4 4 4 4	+54 5 41,32 +50 2 51,11 -21 8 26,76 + 1 53 13,04 +10 44 45,08	9,885 9,875 9,859 9,804 9,722	-9,6542 -9,5888 +9,8567 +9,6074 +9,4200	+9,6015 +9,5772 -9,2488 +8,2102 +8,9572	+0,9950 ,9945 ,9939 ,9916 ,9878	9,9395 ,9396 ,9398 ,9405 ,9417	257 259 2 5 9	-,006 +,021 ,016 ,006 ,018	- ,01 - ,14 - ,06 + ,02 + ,03

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
		.,	Obs.	Jan. 1, 1836.	sion.	u	ь	С	d
316	Eridani	9.10	2	h. m. s. 4 4 40,96	+ 2,919	+8,5100	+8,7701	+ 0,4652	_7,6110
317	Tauri	8	3	4 59,87		,5128	,7745	,5168	+7,7782
318		8	5	6 42,60		,5015	,7710	,5034	+7,5061
319		9	4	7 29,97	3,207		,7731	,5061	+7,5710
320	Persei	8	3	12 7,40	4,512	,6756	,9704	,6544	+8,5628
321	Tauri	9	4	12 26,16	3,067	+8,4787	+8,7744	+0,4867	-6,2212
322	Horologii	6.7	4	14 5,71	1,886	8,6206		,2755	
323	Tauri	8	2	16 35,81	3,539	8,4928	8,8085 9,5466	,5480 1,0029	+8,0494  +9,2202
324 325	Camelop. Tauri	9 7.8	4 4	17 38,42 18 17,38	10,067 3,538	9,2237 8,4864	8,8105	0,5488	+8,0457
		8	3	18 58,63	3,413	+8,4701	+ <b>8,7</b> 975	+0,5331	+7,9091
326 327	Tauri Camelop.	8	3	20 32,93	10,208	9,2206	9,5579	1,0090	9,2144
328	Tauri	9.10	4	21 54,56	3,379	8,4548	8,7968	0,5284	7,8490
329	Persei	9	4	<b>22</b> 32,87	4,194	,5724	,9177	0,6226	8,4041
330	Tauri	8	4	26 3,31	3,505	,4492	,8126	0,5447	7,9755
331	Tauri	9	4	26 35,20	3,281	+8,4283	+8,7934	+0,5160	+7,6614
332	Eridani	. 8	2	27 27,67	2,882	,4222	,7926	,4597	<b>-7,5986</b>
333		8.9	4	29 17,19	2,878	,4143	,7942	,459 <b>1</b> ,4777	-7,5973 -7,1228
334 335		9.10 7.8	2 4	29 29,06 30 29,26	3,004 2,341	,4088 ,4708	,7898 , <b>8</b> 571	,3694	
336	Eridani	8	2	30 58,30	2,882	+8,4064	+8,7953	+0,4597	
337		7	4	31 14,99			,8009	,4465	<b>—7,7437</b>
338		8.9	4	31 26,47	2,303			,3623 ,5545	-8,1906 +8,0147
339 3 <b>40</b>	↑ Tauri Eridani	8.9 7.8	4 4	32 22,26 35 27,19	3,585 2,527	,4295 ,4177	,8263 ,8313		<b>-8,0182</b>
	2d55Eridani	7.8	4	35 43,32	2,869	+ 8,3841	   + 8,7995	   <b>+0,4</b> 577	<b>-7,5832</b>
341 342	Zacoeriani	9	4	35 54,90	2,993	3784	,7949	,4761	-7,1599
343	Tauri	8	4	36 31,58	3,485	3976	,8176	,5422	+7,8991
344	Eridani	8	3	37 56,16	2,396	,4230	,8506	,3795	-8,0981
345		7	4	38 1,39	2,573	,3988	,8272	,4104	7,9645
346	Camelop.	8	4	38 10,12		+8,7588	+9,1891	+0,7709	
347	Tauri	8	4	40 8,98	3,419	,3726		,5339	
348	Camelop.	7.8	3	40 56,02	6,109	,7684 ,3521	9,2153 8,8010	,7860 ,5072	+8,7341
349 350	Orionis Cel. Sculp.	8 8	4	41 28,84 43 12,04	3,215 2,173	,4288	8,8877	,3371	+7,4169  -8,1913
	·	8			2,943	+8,3398	+8,8016	+0,4688	  —7,3330
351 352	Eridani Cel. Sculp.	8	4	43 37,98 43 56,10	2,943		8,8882	,3367	-8,1873
353	Camelop.	7.8	4	45 55,11	7,447	,8788	9,3568	,8720	+8,8613
354	Orionis	7.8	4	46 16,41	2,991	,3225	8,8020	,4758	<b>—7,1</b> 092
35 <b>5</b>	Camelop.	9	4	46 25,98	5,830	,7003	9,1809	,7657	+ 8,6588
356	Eridani	9	3	48 1,20	<b>2</b> ,944	+8,3148		+0,4689	<b>7,3029</b>
357	Orionis	8	4	48 24,14	3,135	,3110	8,8031	,4962	+7,3460
358	Camelop.	8.9	4	48 46,78	5,289	,6107 ,3034	9,1063 8,8033	,7234 ,4912	+ 8,5490 + 6,6965
359 360	Orionis Tauri	8.9 9	3 4	49 36,17 49 39,35	3,099 3,3 <b>93</b>	,3034	8,8169	,5306	
500	14411	•	*	10 30,00	3,000	,5200	-,	1	1 ,,,,,,,,,

No.	No. Obs		Annual Preces-		Logarit	hms of		zi No.	Annua	i P. M.
	000		sion.	a'	<b>b</b> '	c'	d'	Piazzi	A. R.	Decn.
316 317 318 319 320		- 7 15 32,02 +10 36 13,10 + 5 47 10,52 + 6 44 51,33 +50 27 31,31	+9,651 9,625 9,492 9,430 9,068	+9,7332 +9,4232 +9,5353 +9,5145 -9,6149	+ 8,9468 + 8,6799 + 8,7440	9834 9774 9748	,9431 ,9448 ,9456	16 24 28	+,010 -,001 +,009	- ,10 - ,29
321 322 323 324 325	4 2 4 4 4	- 0 19 25,37 -44 40 3,36 +21 5 32,03 +80 12 4,43 +21 14 56,21	9,048 8,928 8,723 8,608 8,587	+9,6425 +9,9722 +8,9085 -9,9117 +8,8808	-9,4956 +9,1953 +9,6265	,9507 ,9407 ,9349	,9520 ,9544	65 76 <b>5</b> 9	+,014 +,022 +,018 +,022 +,019	-,02 -,38 +,04 -,08 +,09
326 327 328 329 330	3 4 4 4	+15 55 46,11 +80 19 15,02 +14 19 +42 43 57,80 +19 37 28,03	8,534 8,375 8,301 8,248 7,965	+9,2253 9,9154 +9,2878 9,4757 +9,0043	+9,0113	+0,9311 ,9230 ,9191 ,9163 ,9012	-9,9566 ,9583 ,9591 ,9597 ,9627		+,009 +,032 +,010 -,008 +,011	+ ,07 - ,11 - ,03 - ,07
331 332 333 334 335	3 4 3 4 4	+ 9 49 34,73 - 8 38 6,83 - 8 45 47,06 - 2 58 49,90 - 31 3 11,00	7,928 7,858 7,713 7,697 7,616	+9,4330 9,7536 9,7551 9,6821 9,9289	+ 8,8311 8,7698 8,7683 8,2983 9,2920	+0,8999 ,8953 ,8872 ,8863 ,8817	9,9630 ,9638 ,9652 ,9653 ,9661	127 131 141 142 151	+,006 +,001 +,005 +,006 -,010	- ,16 - ,02 + ,18 + ,07 - ,04
336 337 338 339 340	2 3 2 4	- 8 33 -12 27 10,10 -31 44 31,85 +22 37 15,56 -23 29 33,58	7,579 7,557 7,541 7,460 7,215	+9,7536 9,7945 9,9325 8,6335 9,8865	8,7498 8,9094 9,2964 +9,1560 9,1567	+0,8796 ,8783 ,8774 ,8727 ,8583	-9,9665 ,9667 ,9669 ,9676 ,9699	152 154 156 158 171	-,004 +,012 +,008 -,001 +,014	+ ,02 + ,04 - ,08 + ,06
341 342 343 344 345	3 2 4 4 4	- 9 6 29,35 - 3 28 41,50 + 18 29 37,46 - 28 15 22,07 - 21 35 19,32	7,188 7,172 7,123 7,014 7,003	+9,7604 9,6893 9,0607 9,9164 9,8745	8,7537 8,3352 +9,0522 9,2191 9,1090	+0,8566 ,8556 ,8527 ,8460 ,8453	-9,9701 ,9702 ,9707 ,9716 ,9717	174 177 188	,010 +,023 +,002 +,014 +,016	+ ,04 + ,03 - ,01 + ,08 + ,03
346 347 348 349 350	3 3 4 4 3	+66 9 1,11 +15 35 45,34 +67 30 1,61 + 6 39 36,84 -35 22 46,52	6,976 6,828 6,746 6,718 6,580	-9,8338 +9,2175 -9,8476 +9,5079 +9,9542	+9,5028 +8,9624 +9,4927 +8,5901 —9,2788	+0,8436 ,8343 ,8290 ,8272 ,8183	-9,9720 ,9732 ,9739 ,9741 ,9752	194 193 205	+,012	- ,00 - ,01 + ,06 + ,09 + ,03
351 352 353 354 355	3 2 2 4 4	- 5 39 32,89 -35 23 12,90 +73 50 27,53 - 3 29 52,83 +65 18 38,30	6,542 6,520 6,324 6,321 6,293	+9,7202 +9,9547 -9,8976 +9,6911 -9,8338	-8,5070 -9,2748 +9,4817 -8,2845 +9,4554	+0,8157 ,8142 ,8010 ,8008 ,7989	-9,9755 ,9757 ,9772 ,9772 ,9775	223 218 238		- ,01 + ,01 - ,03 + ,08 - ,06
356 357 358 359 360	4 2 4 4 1	- 5 35 23,97 + 3 1 16,02 +60 10 15,31 + 1 24 58,22 +14 17 29,19	6,177 6,144 6,100 6,044 6,038	+9,7202 +9,5821 -9,7853 +9,6128 +9,2672	8,4769 +8,2101 +9,4216 +7,8724 +8,8716	+0,7908 ,7884 ,7853 ,7813 ,7809	-9,9783 ,9786 ,9789 ,9793 ,9793	249 242 258	<b>–</b> ,013 j -	- ,08 + ,03 - ,20 + ,04 - ,06

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
				Jan. 1, 1836.	sion.	а	ь	c	d
361 362 363 364 365	Orionis Eridani Orionis	8.9 7 8.9 8	3 3 4 2	h. m. s. 4 50 59,82 51 19,89 51 28,95 53 28,81 53 31,67	**. +3,296 3,240 2,652 3,086 3,099	+8,3016 ,2987 ,3138 ,2794 ,2791	,8262	-0,5180 ,5159 ,4236 ,4894 ,4912	
366 367 368 369 370	2 Leporis Orionis Aurigæ Orionis	5 9 8.9 8.9 8.9	3 4 4 3 4	54 18,92 57 59,08 58 50,73 59 31,40 5 <b>2</b> 1,12	2,594 3,208 2,947 4,439 2,976	,2590 ,2458 ,4024	,8105 ,8103		+7,2854 -7,2181 +8,2646
371 372 373 374 375	Orionis Camelop. Orionis	7.8 7 8 9 7.8	4 3 4 4 4	2 54,87 3 11,95 4 17,46 5 5,23 5 40,56	2,796 9,237 9,079 2,880 2,878		+8,8197 9,4976 9,4868 8,8159 8,8163		+8,8866 +8,8667
376 377 378 379 380	Tauri Orionis Tauri Cel. Sculp. Columbæ	7 7 7.8 7.8 7.8	4 4 2 2 3	7 9,19 7 11,49 7 49,26 7 57,46 8 2,83	3,497 2,909 3,541 2,122 2,400	+8,2038 ,1841 ,2024 ,2669 ,2250	,8156 ,8396	,5491 ,3267	-7,2690 + 7,7357
381 382 383 384 385	Aurigæ Orionis	8 9 9 9 7.8	3 4 4 4 4	8 35,02 8 59,63 9 37,71 10 48,52 11 15,90	3,941 2,905 3,379 3,378 3,122	+8,2493 ,1694 ,1724 ,1620 ,1469	,8165	+0,5956 ,4631 ,5288 ,5287 ,4944	-7,2624 + 7,5374
386 387 388 389 390	Aurigæ Orionis	8.9 8 7.8 8.9 8	4 4 4 4 3	12 41,26 12 50.07 14 37,91 15 55,77 16 26,63	3,772 5,107 3,094 3,145 3,007	,1161 ,1040	9,0824 8,8155 8,8166	,4905 ,4976	+8,3237
391 392 393 394 395	Orionis Tauri Leporis	8.9 7.8 9 7.8 8	4 3 4 4 4	16 35,66 16 40,74 18 4,45 18 6,30 18 30,61	3,092 3,109 5,442 2,758 2,763	+8,0967 ,0955 ,0981 ,0929 ,0883	+8,8162 ,8165 ,8336 ,8284 ,8282	,4926 ,5368	+7,5357 7,4536
396 397 398 399 400	Tauri Orionis Tauri Orionis	8.9 9 9 8 9	4 5 4 4 4	19 13,44 19 50,96 20 21,96 20 51,14 21 14,54	3,555 2,873 3,611 2,871 3,038	,0911	+8,8450 ,8220 ,8515 ,8224 ,8178	,5576	7,2348 +7,6722 7,2280
401 402 403 404 405	Orionis Tauri Orionis Camelop. Tauri	7.8 8.9 8 6.7 7.8	3 4 4 3 4	21 20,51 22 13,81 22 28,97 23 8,17 24 44,30	3,047 3,735 3,142 4,974 3,737	,0857 ,0346	+8,8178 8,8676 8,8188 9,0532 8,8684	+0,4839 ,5723 ,4972 ,6967 ,5725	-6,2509 +7,7405 +6,7836 +8,1845 +7,7108

No.	No.	Declination	Annual Preces-		Logarit	thms of		zi No.	Annual	Р. М.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	e'	ď	Piazzi	A. R.	Decn.
361 362 363 364 365	4 2 4 4 4	+10 8 10,37 + 9 26 48,70 -18 3 44,48 + 0 48 9,45 + 1 21 51,71	+5,927 5,899 5,888 5,721 5,715	9,8506	+8,7169 +8,6842 -8,9591 +7,6094 +7,8378	+0,7728 ,7708 ,7700 ,7574 ,7570	-9,9801 ,9803 ,9804 ,9815 ,9816	265 267 268 277 279	s. -,022 +,018 +,011 +,021 -,001	- ,22 - ,12 + ,05 + ,09 - ,20
366 367 368 369 370	4 4 4 3	-20 17 46,51 + 6 11 43,28 - 5 23 26,16 +46 43 41,36 - 4 3 52,09	5,653 5,340 5,272 5,200 5,001	+9,8692 +3,5145 +9,7177 -9,6085 +9,7007	-8,9902 +8,4589 -8,3923 +9,2766 -8,2479	+0,7523 ,7275 ,7220 ,7164 ,6991	-9,9820 ,9840 ,9844 ,9848 ,9860	285 299 306 301 2	+,012 +,034 +,023 +,013 +,007	- ,04 - ,01 - ,16 + ,17
371 379 373 374 375	4 4 4 4	-11 51 30,74 +78 7 49,21 +77 48 24,75 - 8 15 54,98 - 8 20 46,09	4,928 4,866 4,776 4,741 4,690	+9,7952 -9,9345 -9,9330 +9,7543 +9,7559	8,7032 +9,3758 +9,3671 8,5308 8,5304	+0,6927 ,6872 ,6790 ,6759 ,6712	9,9865 ,9868 ,9873 ,9875 ,9878	311 317 317 12 15	+,025 +,019 +,010 +,030 +,012	- ,01 + ,05 - ,02 + ,03 + ,04
376 377 378 379 380	4 4 4 4	+18 15 0,00 - 6 59 51,23 +19 56 53,04 -36 1 3,76 -27 9 21,86	4,565 4,560 4,503 4,497 4,492	+9,0294 9,7396 8,8751 9,9657 9,9196	+8,8533 9,4418 +8,8849 9,1202 9,0097	+0,6595 ,6589 ,6535 ,6530 ,6524	—9,9884 ,9885 ,9887 ,9888 ,9888	20 24 25 30 29	+,017 +,002 +,006 +,006 +,007	+ ,10 + ,08 - ,14 - ,04 + ,10
381 382 383 384 385	2 4 5 6 3	+33 48 14,12 - 7 7 21,38 +13 23 13,12 +13 22 23,49 + 2 20 33,34	4,435 4,406 4,350 4,247 4,213	-9,2601 +9,7419 +9,2923 +9,2923 +9,5955	+9,0904 -8,4352 +8,7015 +8,6901 +7,9354	+0,6469 ,6441 ,6384 ,6281 ,6246	—9,9891 ,9892 ,9895 ,9900 ,9902	27 33 38 46 49	+,002 +,007 -,007 +,008 +,015	- ,01 - ,08 - ,02 - ,08 - ,07
386 387 388 389 390	3 4 4 4	+28 18 14,44 +57 18 42,32 + 1 7 39,25 + 3 21 38,10 — 2 39 14,63	4,087 4,065 3,928 3,813 3,773	-8,9138 -9,7708 +9,6180 +9,5740 +9,6794	+8,9853 +9,2322 +7,5883 +8,0481 -7,9397	+0,6114 ,6090 ,5941 ,5813 ,5767	9,9908 ,9909 ,9915 ,9920 ,9922	53 50 67 73 82	+,015 +,006 +,018 +,007 -,050	+ ,04 + ,06 + ,07 + ,08
391 392 393 394 395	4 4 3 3	+ 1 1 50,81 + 1 46 8,55 +15 53 35,53 —13 16 48,16 —13 3 13,86	3,753 3,744 3,624 3,624 3,590	9,1703 9,8116	+7,5288 +7,7644 +8,6949 -8,6180 -8,6068	+0,5747 ,5734 ,5592 ,5592 ,5550	—9,9922 ,9923 ,9928 ,9928 ,9929	83 84 89 93 96	+,013 -,001 +,012 +,009 +,007	-,00 +,01 -,06 +,28
396 397 398 399 400	4 4 4 3 4	+20 17 59,52 - 8 28 12,90 +22 24 14,29 - 8 30 57,11 - 1 19 29,84	3,526 3,475 3,429 3,394 3,354		8,4061 +8,8142	+0,5473 ,5409 ,5351 ,5307 ,5256	—9,9932 ,9934 ,9935 ,9937 ,9938	100 104 105 109 110	+,012 +,006 +,006 +,018 +,020	,17 + ,06 + ,06 + ,09 ,17
401 402 403 404 405	4 4 4 3 4	- 0 56 13,40 +26 51 13,49 + 3 13 16,87 +54 18 31,16 +26 51 27,37	3,348 3,268 3,251 3,181 3,049	+9,6532 8,7634 +9,5775 9,7551 8,7781	-7,4269 +8,8671 +7,9590 +9,1157 +8,8372	+0,5248 ,5143 ,5120 ,5026 ,4842	—9,9938 ,9938 ,9942 ,9945 ,9949	111 115 121 117 131	+,010 +,011 +,004 -,055 +,013	- ,07 + ,08 - ,05 - ,05 ,00

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-				
			Obs.	Jan. 1, 1836.	sion.	u	ь	c	d
406	Camelop.	8.9	3	h. m. s. 5 27 32,46	s. +5,507	+8,2899	+9,1411	+0,7409	+8,2339
407	Camelop.	0.3 7	4	28 2,71	4,851	8,1868	9,0445	,6858	+8,0915
408	Aurigæ	8	4	30 13,41	3,922		8,8957	,5935	+7,7420
409	Orionis	8.9	4	30 20,76	3,162	7,9329		,5000	+6,7819
410		9	2	30 31,88	3,006	7,9294	8,8209	,4780	-6,5998
411	Orionis	7	3	30 <b>3</b> 3,41	3,006	+7,9294	+8,8209		-6,5998
412		7	5	30 58,54	2,945	,9248	,8223		-6,8890
413	Columbæ	7	2	31 14,65	2,342		,8775	,3696	<b>-7,6576</b>
414	0::	8	2 3	32 10,02	2,335		,8786		<b>-7,6472</b>
415	Orionis	8	)	32 46,42	3,515	,9174	,8442	,5459	+7,4215
416	Orionis	9	4	32 50,04	3,523	+7,9171		+0,5469	+7,4279
417	Columbæ	9	2	32 56,14		7,9547			-7,6512
418	Orionis Camelop.	8.9 9	3 4	34 38,80 35 38,68	3,519 4,895	7,8868 8,0736	8,8450 9,0519	,5464 ,6897	+7,3939 +7,9813
420	Orionis	9	3	38 7,66	3,440	7,8139	8,8384	,5366	+7,2449
401	A	8		20 16 90		+ 7,8445	   + 8,8925	+0,5901	+7,5656
421 422	Aurigæ Tauri	8.9	3	39 16,22 40 7,98	3,891 3,397	7698	,8352	,5311	7,1494
423	Orionis	8	4	42 11,01	3,539	,7344	,8482		7,2576
424		7	3	43 39,67	3,212	6736			6,7047
425		9	4	44 22,79	3,397	,6638	,8358	,5311	7,0434
426	Leporis	9	4	44 36,76	2,560	+7,6747	+8,8524	+0,4082	7,2264
427	Orionis	7	3	44 38,87	3,214	,6459	,8255	,5070	+6,6817
428	Columbæ	8.9	5	46 11,50	2,101		,9148	,3224	<b>—7,4593</b>
429	Aurigæ	8	2	48 47,46	3,764	,5545	,8756	,5756	+7,2194
430	Orionis	7.8	4	49 42,81	3,110	,4667	,8237	,4928	+5,9717
431	Orionis	9	4	50 11,41	3,345	+7,4550	+8,8327		+6,7633
432	Cominon	8	4	53 93,72	3,493	,2908	,8447	,5432	6,7730
433 434	Geminor. Orionis	<b>8</b> 8	4	53 42,58 53 42,59	3,765 3,249	,2942 ,2506		,5758 ,5117	6,9595 6,3776
435		8.9	4	55 45,96	3,437	,0817	,8398	,5362	6,5073
426	Cominas	8		56 10 00	2 725	1 7 0692	1.0 0799	1.0.5700	
436 437	Geminor. Orionis	6.7	2 4	56 10,88 56 13,56	3,735 3,195	+7,0683 7,0138	+8,8722 8,8258	+0,5723	+6,7184 5,9901
438	Aurigæ	7.8	4	56 15,87	4,116	7,1077	8,9279	,6145	6,8980
439	Orionis	8.9	3	56 48,48	3,364	6,9415		,5269	6,2768
440	Camelop.	7	3	58 54,13	6,644	6,7436	9,2799	,8224	6,7153
441	1.41 Aurigæ	7	4	59 3,11	4,592	+6,4685	+9,0048	+0,6620	+6,3446
442	Leporis			6 0	2,499	5,8010	8,8601	,3978	+5,3944
443	Camelop.	8	4	1 32,39	5,314	7,0261	9,1152	,7254	6,9603
444 445	Columbæ Aurigæ	8	4 3	1 38,79 2 44,73	2,061	6,8167 7,1120	8,9216 8,9855	,3141 6505	+6,5964
	-	[	٥	2 44,73	4,472	1,1120	,	,6505	<b>6,9721</b>
446	Geminor.	9	4	4 7,81	3,663	<b>-7,1399</b>	+8,8632	+0,5638	6,7498
447 448	Lyncis	8 8	3	4 4 26,09	3,663	7,1464		,5638	<b>6,7557</b>
449	Orionis	7	3	5 16,28	5,345 3,45 <b>3</b>	7,4410 7,2240	8,841 <b>1</b>	,7279 ,5382	-7,3768 -6,6665
450	Monocer.	8	2	7 46,64	2,924	7,3692		,4660	+6'4003
	· · · · · · · · · · · · · · · · · · ·	1			,	,::::		,	. 5 2000

No.	No.	Declination	Annual Preces-		Logarith	ıms of		zi No.	Annual	Р. М.
	Obs.	Jan. 1, 1836.	sion.	a'	<i>b'</i>	c'	d'	Piazzi	A. R.	Decn.
406 407 408 409 410	4 4 3 4 2	+61 30 20,19 +53 24 14,80 +32 47 54,55 + 4 2 17,88 - 2 42 0,19	+2,795 2,755 2,576 2,570 2,553	-9,8215 -9,7292 -9,2355 +9,5599 +9,6803	+9,0884 +9,0428 +8,8307 +7,9569 —7,7754	+0,4464 ,4401 ,4109 ,4099 ,4070	—9,9957 ,9959 ,9964 ,9964	143 146 168 170 173	s. -,023 +,011 +,016 +,017 +,005	+0,11 -,51 -,08 -,08 +,04
411 412 413 414 415	4 2 4 4 3	- 2 41 40,42 - 5 17 40,06 -28 43 35,82 -28 56 7,35 +18 36 2,04	2,553 2,518 2,495 2,414 2,356	+9,6803 9,7185 9,9335 9,9345 8,9731	-7,7754 -8,0632 -8,7767 -8,7654 +8,5743	+0,4070 ,4010 ,3970 ,3827 ,3721	—9,9964 ,9965 ,9966 ,9968 ,9970	174 175 181 190 187	-,001 +,010 +,008 -,007 -,003	+ ,07 ,05 + ,08 + ,07 + ,08
416 417 418 419 420	2 4 4 2 4	+18 53 59,16 -29 48 38,62 +18 45 11,58 +53 57 43,76 +15 39 11,26	2,350 2,350 2,194 2,094 1,886	+8,9494 +9,9400 +8,9638 9,7396 +9, <b>1</b> 732	+8,5799 -8,7657 +8,5463 +8,9270 +8,4046	+0,3711 ,3711 ,3412 ,3212 ,2756	—9,9970 ,9970 ,9974 ,9976 ,9981	189 193 198 199 218	+,013 +,026 +,013 +,012 +,010	- ,15 - ,28 + ,03 + ,04 - ,07
421 422 423 424 425	4 4 4 4	+31 43 33,14 +13 51 43,21 +19 28 11,32 + 6 9 49,69 +13 50 52,22	1,788 1,717 1,538 1,410 1,346	-9,1903 +9,2601 +8,8808 +9,5105 +9,2601	+8,6712 8,3126 8,4080 7,8783 8,2066	+0,2523 ,2350 ,1869 ,1491 ,1290	—9,9983 ,9984 ,9987 ,9989 ,9990	225 232 245 255 258	+,003 +,019 +,009 +,025 +,011	+ ,05 - ,03 - ,01 + ,06 ,00
426 427 428 429 430	2 4 3 4 4	-20 53 10,16 + 6 12 44,78 -35 57 11,72 +27 32 18,61 + 1 49 59,26	1,328 1,323 1,195 0,955 0,880	+9,8808 +9,5092 +9,9717 8,8865 +9,6042	-8,3730 +7,8552 -8,5437 +8,3433 +7,1476	+0,1233 ,1214 ,0772 9,9804 ,9445	—9,9990 ,9990 ,9992 ,9995 ,9996	263 260 270 279 282	+,019 +,010 +,010 +,004 +,024	- ,27 - ,04 - ,11 + ,04 + ,01
431 432 433 434 435	4 4 2 4 4	+11 44 33,16 +17 39 32,32 +27 34 6,12 + 7 41 29,39 +15 27 3,97	0,838 0,559 0,530 0,530 0,350	+9,3463 +9,0414 -8,8921 +9,4713 +9,1818	+7,9302 7,9281 8,0833 7,5498 7,6674	+9,9239 ,7479 ,7247 ,7247 ,5438	9,9996 ,9998 ,9998 ,9998 ,9999	284 300 303 305 317	+,009 +,015 +,012 +,015 +,001	+ ,07 + ,07 + ,09 - ,11 - ,04
436 437 438 439 440	4 4 4 4	+26 31 55,48 + 5 25 18,79 +38 5 24,38 +12 29 9,58 +69 30 32,98	0,315 0,305 0,303 0,257 0,058	-8,7708 +9,5276 -9,4409 +9,3181 -9,8949	+7,8461 ,1643 ,9700 ,4425 ,4354	+9,4981 9,4899 9,4817 9,4091 8,7657		319 321 318 324 326	+,013 -,003 +,006 +,013 ,000	+ ,08 - ,06 - ,04 + ,02 - ,06
441 442 443 444 445	2 4 4 4	+48 44 14,55 -23 4 +59 15 2,26 -37 1 4,47 +46 25 55,93	+0,058 0,017 0,163 0,158 0,268	-9,6684 +9,8982 -9,8041 +9,9768 -9,6284	+7,3398 +6,5342 -7,8451 +7,6747 -7,9865		-0,0000 0,0000 0,0000 0,0000 0,0000	333 345 343 4 1	+,026 +,012 +,006 -,001	,00   ,06   + ,09   + ,19
446 447 448 449 450	5 4 4 4 2	+24 1 26,03 +23 59 28,10 +59 36 26,39 +16 4 33,38 - 6 9 40,27	0,379 0,383 0,420 0,483 0,699	-8,0414 -8,0414 -9,8082 +9,1461 +9,7308	<b> </b> —7,8253	,6230	—9,9999 ,9999 ,9999 ,9997	13 14 10 24 44	00,0 +,008 ,000	$\begin{vmatrix} - & 09 \\ 1 & - & 12 \\ 1 & + & 14 \end{vmatrix}$

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
				Jan. 1, 1836.	sion.	a	b	c	d
451 452 453 454 455	Monocer.  Aurigæ Canis. Maj.	9 9.10 9.10 8.9 6.7	1 3 4 3	h. m. s. 6 & 11,85 8 8 23,67 8 24,31 10 9,61	s. +2,768 2,767 2,925 4,813 2,511	-7,3986 ,4055 ,4006 ,6212 ,5127	8,8261	,4661	+6,7476 +6,4294 -7,5211
456 457 458 459 460	Lyncis Monocer. Canis. Maj. Lyncis Monocer.	8.9 7.8 8.9 8 9	3 4 4 3 4	10 10,12 10 29,70 12 7,21 12 17,35 13 45,41	3,360 2,748	,5018 ,5644 ,8504		,5263 ,4390 ,7197	7,7925 6,8319 +6,9326 7,7811 +6,1396
461 462 463 464 465	Monocer.  Geminor. Columbæ 15 Geminor.	7.8 9 8 9 9.10	3 3 4 3	14 17,45 15 5,14 16 23,59 16 33,44 17 59,24	3,176 3,404 2,177	,6505 ,6969	,8362 ,9031	,5019 ,5320 ,3379	-6,5624
466 467 468 469 470	Monocer. Canis. Maj Lyncis. Geminor.	9 8 8 9.10 9	4 2 2 4 4	18 14,39 18 20,33 18 25,15 19 56,48 20 55,85	3,080 2,079 5,311	7,7312 7,8267 8,0635	8,8 <b>22</b> 5 8,9180 9,1144	,4885 ,3178 ,7252	
471 472 473 474 475	Canis. Maj. Geminor. Monocer. 20 Geminor. Monocer.	. 8 8 9 8 7.8	3 2 4 2 4	20 59,17 22 5,45 22 7,47 22 43,45 24 54,98	3,448 3,303 3,497	,8290 ,8187 ,8462	,8389 ,8286 ,8432	,5376 ,5189 ,5437	+7,5850 -7,26\0 -7,0605 -7,3335 -6,9737
476 477 478 479 480	Aurigæ Geminor. ————————————————————————————————————	7.8 8 7.8 7.8 pr 9	3 3 4 4 3	25 22,38 25 27,21 26 23,71 28 16,22 29 11,15	3,471 3,462 3,674	,8913 ,9060 ,9582	,8394 ,8618	,5404 ,5393 ,5651	-7,6601 -7,3544 -7,3611 -7,5773 +7,4553
481 482 483 484 485	12 Lyncis pr. Canis. Maj	8 8	1 4 3 3 4	30 19,49 30 52,13 31 42,76 31 50,84 32 35,02	2,238 5,323 2,637	8,0257 8,2642 7,9903	8,8919 9,1155 8,8416	,3499 ,7262 ,4211	+7,7509 -8,1999 +7,4814
486 487 488 489 490	Monocer. Canis. Maj Aurigæ	8	9 3 4 3	36 28,56 37 16,58 37 20,27 37 52,28 38 55,41	3,129 2,676 4,450	,0359 ,0546 ,2 <b>0</b> 42	8,8185 8,8365 8,9790	,4954 ,4275 ,6484	-8,1537 -6,7035 +7,5117 -8,0638 +7,6285
491 492 493 494 495		. 9 8.9 8.9 8.9 6.7	$\begin{vmatrix} 2\\1 \end{vmatrix}$	40 5,09 41 22,90	2,574 2,565 2,735	,0843 ,0954 ,0932	,8461 ,8468 ,8302	,4106 ,4091 ,4370	+7,6303 +7,6484

No.	No.	Declination	Annual Preces-		Logarith	ms of		zi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	<b>b</b> '	c'	d'	Piazzi	A. R.	Decn.
451 452 453 454 455	8 1 4 4	-12 40 -12 41 22,93 - 6 8 11,50 +52 34 51,48 -22 38 55,92	-0,734 0,746 0,752 0,764 0,903	+9,8082 +9,8082 +9,7308 -9,7243 +9,8949	+7,9056 +7,9130 +7,6029 -8,4808 +8,2395	—9,8660 ,8728 ,8762 ,8829 ,9559	—9,9997 ,9997 ,9997 ,9997	46 48 47 39 59	*. +,016 +,010 +,014 +,027	+ ,02 + ,05 - ,07 - ,19
456 457 458 459 460	3 4 4 2 4	+63 42 44,18 +12 21 13,74 -13 29 27,96 +58 29 47,27 - 1 57 27,66	0,921 0,923 1,072 1,113 1,218	-9,8414 +9,3222 +9,8162 -9,7952 +9,6702	8,6148 7,9979 +8,0965 8,6753 +7,3154	—9,9642 9,9697 0,0303 ,0465 ,0856	—9,9995 ,9995 ,9994 ,9993 ,9992	50 58 72 61 76	+,027 +,016 +,005 +,013 +,026	- ,05 + ,03 + ,03 - ,02 - ,08
461 462 463 464 465	2 3 1 3	+ 3 50 5,75 + 4 42 8,60 + 14 10 35,19 - 33 47 28,72 + 20 52	1,264 1,340 1,450 1,462 1,590	+9,5635 9,5453 9,2480 9,9614 8,6990	-7,6250 -7,7371 -8,2488 +8,6081 -8,4514	0,1019 ,1271 ,1615 ,1650 ,2014	—9,9991 ,9990 ,9989 ,9988 ,9986	77 85 94 97 99	+,010 ,004 +,012 +,014 +,013	— ,07 — ,30 — ,07 + ,07
466 467 468 469 470	3 4 2 4 4	+10 24 44,93 + 0 31 39,12 -36 37 5,38 +59 18 25,64 +20 31 26,62	1,613 1,619 1,619 1,776 1,851	+9,3927 +9,6284 +9,9745 —9,8028 +8,7559	8,1629 6,8762 +8,6829 8,8819 8,5102	0,2077 ,2093 ,2093 ,2494 ,26 <b>7</b> 5	—9,9986 ,9986 ,9986 ,9983 ,9981	102 105 112 106 120	+,019 +,026 ,001 +,001 +,023	- ,18 ,12 ,06 ,18 + ,15
471 472 473 474 475	4 2 4 3 3	-32 4 1,82 +15 57 39,02 +10 2 42,67 +17 53 15,62 + 7 21 24,09	1,845 1,950 1,950 2,008 2,194	+9,9528 ,1584 ,4031 ,0294 ,4814	+8,6892 - ,4271 - ,2299 - ,4881 - ,1462	0,2661 ,2900 ,2900 ,3028 ,3412	9,9981 ,9979 ,9979 ,9978 ,9974	127 129 131 134 149	+,015 +,005 +,014 ,000 +,016	- ,08 - ,06 - ,12 + ,04 + ,06
476 477 478 479 480	4 4 4 2	+31 36 10,58 +16 53 6,42 +16 34 17,01 +24 35 3,10 —18 31 49,89	2,234 2,240 2,321 2,483 2,558	-9,1818 +9,1004 +9,1238 -8,2553 +9,8609	-8,7665 - ,5113 - ,5188 - ,7121 + ,6082	0,3491 ,3502 ,3657 ,3950 ,4080	-9,9973 ,9973 ,9971 ,9966 ,9964	150 153 157 168 178	+,013 +,005 +,017 +,009 +,009	+ ,02 + ,07 + ,03 - ,06 + ,09
481 482 483 484 485	3 4 3 4 3	-31 45 16,99 -32 5 16,63 +59 35 51,24 -18 2 38,86 + 4 17 35,13	2,657 2,703 2,795 2,795 2,858	+9,9499 + ,9557 - ,8021 + ,8573 + ,5551	+8,8437 +8,8551 -9,0802 +8,6356 -8,0275	-0,4243 ,4318 ,4464 ,4464 ,4562	-9,9961 ,9960 ,9957 ,9957 ,9955	187 191 184 196 200	+,019 +,035 -,005 +,014 +,016	,13 ,03 ,10 ,14 ,13
486 487 488 489 490	4 4 3 3	+53 12 16,50 + 2 39 49,87 -16 34 1,68 +46 21 37,52 -20 36 25,96	3,26 <b>2</b> 3,268 3,320	—9,7243 + ,5877 + ,8432 — ,6180 + ,8768	-9,1073 -7,8792 +8,6673 -9,0787 +8,7759	-0,5058 ,5135 ,5143 ,5211 ,5315	-9,9944 ,9942 ,9941 ,9940 ,9937	215 221 225 220 233	+,018 +,015 +,011 +,017 +,023	- ,03 - ,17 - ,05 - ,03 + ,01
491 492 493 494 495	4 2 5 3 3	—20 26 19,65 —20 35 6,50 —20 55 43,69 —14 12 38,49 +39 3 20,68	3,417 3,438 3,612	+ ,8215	+8,7739 +8,7777 +8,7948 +8,6460 -9,0601	,5337 ,5438	,9933 ,9928	235 236 242 249 244	+,027 +,016	-,10 -,02 -,04 -,00 -,13

No.	Sta	ır's name and	Mag.	No. Obs.	Asce	ght nsion	Annual Preces-				
					Jan. 1,	, 1836.	sion.	и	b	c	d
496 497 498 499 500	h2	Canis. Maj. Lyncis	8 7.8 8.9 8.9	3 4 4 4	43 44	\$. 24,66 58,25 14,69 36,04		-8,1733 ,1297 ,1777 ,3869 ,3892	8,8850		+7,9019 +7,6387 +7,8960 -8,3143 -8,3168
501 502 503 504 505		Geminor. Canis. Maj. Lyncis Canis. Maj.	8 8.9 9 8.9 8	3 3 4 4	51		2,637 4,488	-8,1388 ,1986 ,1503 ,3451 ,2396		,3387 ,4211 ,6520	-7,6261 +7,9473 +7,6461 -8,2126 +7,9218
506 507 508 509 510		Geminor. Lyncis Canis. Maj. Lyncis Geminor.	8 8.9 8 8 8.9	4 3 4 4 3	54 58 58	22,17 28,48 4,90 28,38 37,87	3,562 4,600 2,731 4,618 3,436	,4211	9,000 <b>8</b> 8,82 <b>4</b> 0	,4363 ,6644	-7,7768 -8,2702 +7,6413 -8,3063 -7,6815
511 512 513 514 515		Navis Can. Min.	8 9 8.9 9	4 4 4 3 3		48,97			,8117 ,8105	,5091 ,5066 ,5058	7,3393 <b>7,</b> 2956
516 517 518 519 520		Can. Maj. Geminor. Can. Min. Camelop.	8 8 9 8 9	3 3 4 4 4	3 3 4	59,47 16,97 27,95 46,03 34,06	2,470 3,445 3,305 3,316 5,288	,2788		,5372 ,5192 ,5207	-7,7286 -7,5286
521 522 523 524 525		Can. Min. Lyncis Can. Min. Camelop.	9 8 8 8.9 var.	4 4 4 3 4	6	40,14 5 15,04 5 31,43 7 8,26 9 25,34	4,190 3,288 5,396	,4043 ,2882 ,6039	8,9290 8,8116 9,1222	,6222 ,5169 ,7321	-7,4405 -8,2231 -7,5178 -8,5467 -8,5376
526 527 528 529 530	19	Can. Min.  Lyncis  Can. Maj.	9 8 8 8.9 8	4 3 4 3 2	7 8 9 9 12	1,21 26,50	3,284 3,287 4,927 4,932 2,485	8,2947 ,2974 ,5485 ,5492 ,3585	+8,8108 8,8107 9,0511 9,0518 8,8433	+0,5164 ,5160 ,6837 ,6930 ,3953	7,5176 7,5254 8,4648 8,4649 +7,9790
531 532 533 534 535	M.	Navis Geminor. Navis Lyncis	7 8.9 7.8 8	3 2 3 3 3	14 15 15	59,96 33,61 33,86 55,80 40,82	1,855 3,611 3,864 2,288 4,406	8,4613 ,3666 ,4081 ,4072 ,5279	+8,9423 ,8371 ,8723 ,8698 ,9614	+0,2683 ,5576 ,5870 ,3595 ,6440	+8,3007 -7,9626 -8,1349 +8,1279 -8,3911
536 537 538 539 540	1.a	Geminor. Monocer. Geminor. Can. Min.	8.9 6.7 4.5 8	4 3 2 4	21 24 25	. ,	3,733 2,909 3,854 3,756 <b>3,190</b>	8,4194 ,3700 ,4529 ,4431 ,3926	+8,8497 ,7992 ,8665 ,8511 ,7943	+0,5721 ,4637 ,5859 ,5747 ,5038	8,0903 +7,4701 8'1799 8,1282 7,3846

No.	No.	Declination	Annual Preces-		Logaria	thms of		zi No.	Annua	P. M.
110.	Obs.	Jan. 1, 1836.	sion.	a'	<b>b</b> '	c'	d'	Piazzi	A.R.	Decn.
496 497 498 499 500	4 4 2 3 2	-32 21 26,53 -18 49 28,07 -31 30 50,91 +57 47 19,94 +57 49 52,96	-3,784 3,836 3,859 3,905 3,922	+9,9508 +9,8621 +9,9460 -9,7774 -9,7774	+9,0046 +8,7909 +9,0028 -9,2171 -9,2191	-0,5780 ,5839 ,5864 ,5916 ,5935	—9,9921 ,9919 ,9918 ,9916 ,9915	258 260 262 255 256	s. +,010 ,054 +,007 +,008	+0,07 ,00 +,07 -,11 -,01
501 502 503 504 505	4 4 3 4 4	+17 52 55,90 -34 5 10,58 -18 14 48,57 +47 29 8,31 -28 44 25,47	3,939 3,933 4,036 4,498 4,577		-8,7806 +9,0414 +8,7997 -9,2185 +,0407	-0,5954 ,5947 ,6059 ,6530 ,6606	9,9914 ,9915 ,9910 ,9888 ,9884	265 268 272 298 307	+,017 +,020 +,012 +,016	- ,04 + ,09 + ,18 + ,02 + ,19
506 507 508 509 510	4 4 4 4 1	+20 49 48,34 +49 42 33,91 -14 37 43'77 +50 9 18,63 +15 47 29,85	4,730 4,747 5,041 5,081 5,075	+8,7853 -9,6628 +9,8228 -9,6674 +9,1818	-8,9236 -9,2569 +8,8030 -9,2891 -8,8407	-0,6749 ,6764 ,7025 ,7059 ,7054	—9,9876 ,9875 ,9858 ,9856 ,9856	311 309 328 326 329	+,005 -,009 +,010 -,063 +,009	+ ,19   - ,11   - ,08   - ,16   + ,18
511 512 513 514 515	1 4 4 2 3	-43 23 20,09 + 7 6 13,69 + 6 19 58,19 + 6 4 44,01 + 5 59 58,28	5,109 5,272 5,351 5,365 5,379	+9,9908 9,4941 9,5119 9,5185 9,5198	+9,2433 8,5120 8,4691 8,4521 8,4497	0,7083 ,7220 ,7284 ,7289 ,7307	—9,9854 ,9844 ,9839 ,9839 ,9838	337 342 345 347 1	-,007 +,015 +,017 +,060 +,012	+ ,09 + ,11 - ,22 ,00 - ,09
516 517 518 519 520	3 4 4 3 4	-24 56 55,88 +16 21 11,90 +10 27 51,64 +10 57 49,14 +59 58 51,70	5,452 5,485 5,497 5,609 5,687	+9,9025 +9,1614 +9,4014 +9,3838 -9,7875	8,8867 8,6974 8,7262	-0,7365 ,7392 ,7401 ,7489 ,7549	9,9833 ,9831 ,9830 ,9823 ,9818	14 9 12 23 20	-,003 +,013 +,014 +,015 +,021	- ,13 + ,03 - ,21 + ,07 - ,11
521 522 523 524 525	3 4 4 3 4	+ 8 18 32,03 +41 13 44,67 + 9 46 34,39 +61 13 24,36 +60 37 14,61	5,681 5,737 5,754 5,816 5,838	+9,4639 -9,4843 +9,4249 -9,7993 -9,7931		-0,7545 ,7587 ,7600 ,7646 ,7662	-9,9818 ,9814 ,9813 ,9809 ,9807	26 28 34 30 33	+,015 +,008 +,019 +,004 +,012	- ,01 + ,09 - ,05 + ,21 - ,13
526 527 528 529 530	5 4 1 4 3	+ 9 37 6,21 + 9 44 50,07 +55 34 58,80 +55 38 23,08 -24 39 36,82	5,843 5,877 6,010 6,010 6,238	+9,4281 +9,4249 -9,7340 -9,7340 +9,8982	8,6875 8,6952 9,3933 9,3936 +9,1136	-0,7667 ,7691 ,7789 ,7789 ,7950	—9,9807 ,9805 ,9795 ,9795 ,9779	40 43 47 49 73	+,012 ,013 +,034 +,024 ,004	- ,04 - ,04 - ,11 - ,13 - ,09
531 532 533 534 535	4 3 4	-43 41 23,49 +23 14 26,54 +32 12 45,62 -31 44 +46 52 26,43	6,288 6,426 6,509 6,531 6,932	+9,9868 +8,3979 -9,1367 +9,9375 -9,5888	+9,3359  -9,1020  -9,2384  +9,2338  -9,4021	0,7985 ,8079 ,8135 ,8150 ,8408	—9,9775 ,9764 ,9758 ,9756 ,9723	82 84 89 93 112	+,018 +,016 -,005 +,005 +,005	+ ,02 - ,10 + ,08 ,00 - ,01
536 537 538 539 540	5 4 4 3	+27 57 31,16 - 7 13 28,04 +32 14 26,26 +28 58 + 5 38 56,01	6,976 6,992 7,215 7,297 7,390	-8,7482 +9,7396 -9,1173 -8,8513 +9,5327	—9,2125 +8,6427 —9,2833 —9,2463 —8,5586	0,8436 ,8446 ,8583 ,8631 ,8686	9,9720 ,9718 ,9699 ,9691 ,9683	118 120 127 136 142	+,008 +,012 ,000 +,018 +,011	- ,04 + ,19 - ,08 - ,08

No.	Star's name and	Mag.	No. Obs.	Asc	Right	on	Annual Preces-		Logarit	hms of	
			008.	Jan.		i	sion.	а	b ,	с	d
541 542 543 544 545	Canis Min. Navis Canis Min. Navis	7.8 7 7 7.8 8.9	4 3 5 4 3	7	27 1 27 5 28 3	5. 22,02 8,52 60,87 67,53	*. +3,146 2,403 3,203 3,193 2,538	-8,3914 ,4502 ,4004 ,4037 ,4394	+8,7931 ,8464 ,7936 ,7926 ,8268	+0,4977 ,3807 ,5056 ,5042 ,4045	+8,1249 -7,4349 -7,4058
546 547 548 549 550	Camelop. pre  Camelop. pre  seq.  K <sup>2</sup> Navis  Canis Min.  Geminor.	e. 8.9	4 4 5 3		30 1 30 1 32	14,04 14,44 10,68 4,05	5,778 5,778 2,457 3,163 3,629	8,7926 ,7926	+9,1718	-	-8,7518 -8,7518 +8,1134 -7,3070
551 552 553 554 555	Monocer.  Navis  21  22  22	8 8.9 7.8 8.9 7.8	4 4 3 4 4		37 37 37 37 37 37 37 37 37 37 37 37 37 3	40,38 38,24 49,16 56,30 56,57	2,955 2,190 2,758	,4427 ,5325 ,4556	,8741 ,7965	+0,4885 ,4706 ,3404 ,4406 ,4406	+7,4082 +8,3000 +7,8483
556 557 558 559 560	Camelop. Navis Lyncis Monocer.	5.6 8.9 8 7.8 8	4 2 3 4 2		38 40 40	38,74 38,78 20,04 29,26 17,94	2,142 2,139 3,872	8,5445 ,5525 ,5324	8,8818 8,8815 8,8601	,3302 ,5879	+8,3273 +8,3372 -8,2758
561 562 563 564 565	Geminor. Monocer.	7.8 8 8.9 7.8 8.9	3		44 44 44	18,81 26,01 27,24 42,01 7,66	3,838 2,963	,4897 ,5435 ,4708	8,7986 8,8518 8,7784	,5841	+7,9781 -8,2761 +7,4125
566 567 568 569 570	Canis Min. Navis Lyncis	8.9 7.8 9 8	2 2 4		48 49 49	18,45 21,88 28,20 55,91 18,40	3,257 2,575 4,733	,4886 ,5217 ,7260	8,8068 9,0 <b>0</b> 83	,5128 ,4108 ,6751	-7,6861 $+8,1061$ $-8,6371$
571 572 573 574 575	Navis Cancri	7.8 8 8 7.8	3 4		52 53 53	14,26 31,81 1,53 27,10 45,93	3,500 3,571 3,391	,5259 ,5355 ,5173	,7965 ,8043 ,7840	,5441 ,4101 ,5303	-8,0637 +8,1259 -7,9414
576 577 578 579 580	Cancri Monocer. Cancri	8 9 8.9 8	4 4 4 4	8	0	22,77 22,93	3,292 7 3,086 3 3,263	5317 5 ,5249 5 ,5343	7 ,7691 7 ,7608 7 ,7658	,5175 ,4894 ,5136	-7,8110 -6,7368 -7,7579
581 582 583 584 584	2   Navis 6   Cancri 4   Lyncis	8 9 8 7 8	3 4 2		4 5	43,0° 34,2°	7 2,685 0 3,297 6 4,674	5584 7 ,5466 1 ,7790	7803 7646 9923	,4289 ,5181 ,6697	

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarit	hms of		zi No.	Annual	Р. М.
		Jun. 1, 1000.	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
541 542 543 544 545	4 4 4 4 2	+ 3 37 38,16 -28 12 57,90 + 6 13 11,63 + 5 45 55,05 -23 11 22,97	7,390 7,470 7,514 7,579 7,660	+9,5729 +9,9143 +9,5198 +9,5302 +9,8831	-8,3685 +9,2461 -8,6085 -8,5797 +9,1743	-0,8686 ,8733 ,8759 ,8796 ,8808	—9,9683 ,9675 ,9671 ,9665 ,9663	143 148 150 158 165	s. +,018 +,013 +,001 +,013 +,003	+0,02 +,05 +,14 +,02 +,05
546 547 548 549 550	1 7 3 2 4	+65 32 13,62 +65 32 21,66 -26 26 4,51 + 4 27 4,75 +24 37 35,06	7,724 7,724 7,853 7,863 8,024	-9,8195 -9,8195 +9,9025 +9,5575 +8,1139	-9,5450 -9,5450 +9,2416 -8,4818 -9,2221	0,8878 ,8878 ,8950 ,8956 ,9044	-9,9651 ,9651 ,9638 ,9637 ,9621	159 160 177 174 182	-,018 -,013 +,007 +,001	+ ,15 + ,08 + ,12 + ,10 - ,07
551 552 553 554 555	4 4 3 4 4	+ 0 34 16,72 - 5 17 14,34 -35 49 47,52 -14 17 33,84 -14 17 50,11	8,062 8,296 8,307 8,317 8,322	+9,6284 ,7126 ,9469 ,8102 ,8102	-7,6000 +8,5824 +9,3849 +9,0107 +9,0110	-0,9064 ,9188 ,9194 ,9200 ,9202	—9,9617 ,9592 ,9591 ,9590 ,9589	189 202 206 206 204 205	+,010 +,011 +,017 +,019 +,007	- ,03 - ,11 - ,04 - ,12 - ,15
556 557 558 559 560	4 2 4 2	+79 54 33,10 37 19 52,61 37 32 +33 38 24,41 8 46 28,91	8,418 8,375 8,508 8,529 8,665	-9,9124 + ,9523 + ,9523 - ,1492 + ,7536	9,6164 +9,4038 +9,4126 9,3723 +8,8197	-0,9252 ,9230 ,9298 ,9309 ,9378	—9,9579 ,95×3 ,9569 ,9566 ,9551	187 209 218 215 228	-,017 +,046 +,013 +,008 +,018	- ,16 + ,01 + ,01 ,00
561 562 563 564 565	4 4 4 3	- 3 11 15,83 -17 56 30,56 +32 42 25,37 - 5 0 38,77 +65 10 40,78	8,671 8,833 8,844 8,854 8,901	+9,6839 + ,8395 ,0792 + ,7076 ,8000	+8,3829 +9,1330 -9,3773 +8,5869 -9,6053	0,9381 ,9461 ,9466 ,9472 ,9495	—9,9550 ,9531 ,9530 ,9528 ,9523	227 241 238 242 236	+,009 +,017 ,013 +,005 +,022	+ ,03 + ,15 - ,10 - ,17 - ,19
566 567 568 569 570	5 4 3 4 4	- 2 22 20,04 + 9 4 25,41 -22 34 16,13 +54 34 26,35 - 3 11 59,49	8,980 9,146 9,229 9,276 9,291	+9,6730 + ,4609 + ,8704 - ,6730 + ,6830	+8,2702 -8,8568 +9,2475 -9,5764 +8,4129	0,9533 ,9612 ,9652 ,9673 ,9681	—9,9513 ,9493 ,9483 ,9477 ,9475	247 258 264 260 268	+,005 +,006 +,029 +,007 +,014	,00 ,05 + ,05 ,11 + ,08
571 572 573 574 575	4 4 4 4	+20 15 32,10 +20 11 4,42 -22 54 22,60 +15 23 55,59 - 3 2 7,98	9,368 9,471 9,502 9,538 9,925	+9,0043 ,0128 ,8710 ,2648 ,6803	-9,2089 -9,2123 +9,2662 -9,1016 +8,4123	-0,9717 ,9764 ,9778 ,9795 ,9907	9,9465 ,9451 ,9447 ,9442 ,9408	272 280 287 286 300	+,003 +,013 +,025 +,009 +,014	- ,08 - ,15 + ,04 - ,05 + ,18
576 577 578 579 580	4 4 1 4	+35 56 21,18 +10 58 58,13 + 0 55 57,61 + 9 38 39,70 — 6 15 57,88	10,003 10,042 10,067 10,142 10,193	-9,1987 + ,4166 + ,6232 + ,4533 + ,7202	9,4666 8,9791 7,9128 8,9278 +8,7455	1,0001 ,0018 ,0029 ,0061 ,0083	—9,9378 ,9372 ,9369 ,9358 ,9350	308 313 315 322 2	+,022 +,019 +,004 +,004 +,026	- ,27 - ,01 + ,04 - ,06 - ,04
581 582 583 584 5×5	1 4 4 4 4	+18 7 56,40 -18 29 29,07 +11 20 19,62 +54 38 26,97 +18 4 3,63	10,247 10,313 10,382 10,462 10,512	+9,1614 + ,8351 + ,4099 - ,6484 + ,1732	-9,2017 + ,2129 - ,0077 - ,6291 - ,2113	—1,0106 ,0134 ,0163 ,0196 ,0217	—9,9342 ,9333 ,9321 ,9309 ,9301	6 12 13 15 20	+,016 +,019 +,010 +,014 +,012	- ,37 + ,03 - ,01 - ,15 - ,05

No.	Star's name and I	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
			008.	Jan. 1, 1836.	sion.	a	ь	c	d
586 587 588 589 590	Navis Cancri Lyncis Cancri	7 8 8 8 8	3 3 3 1	h. m. s. 8 6 50,85 7 20,41 7 23,87 7 36,56 8 46,54	3,266 3,660 4,610	,5532 ,5992 ,7754	,7594 ,8051	,5635 ,6637	-7,7886 -8,2642 -8,6816
591 592 593 594 595	Cancri Navis Cancri	8 8 8 8.9 9	3 4 3 4 5	9 29,98 9 52,24 13 25,12 14 2,20 16 41,14	2,750 3,288 3,443	,5710 ,5729 ,5900	+8,7564 ,7645 ,7538 ,7681 ,7977	,4393 ,5169	+8,0056
596 597 598 599 600	Cancri Navis Monocer.	7.8 7.8 6 8	3 3 3 2	16 54,1 17 55,6 18 2,1 20 12,5 24 1,7	3,226 9 2,589 0 3,031	,5818 ,6153 ,5840	,7773 ,7369	,5087 ,4131 ,4816	-8,2446 -7,7343 +8,2166 +7,1232 +8,1298
601 602 603 604 605	Monocer.  Hydræ Cancri 3 Leo. Min.	8 8.9 7.8 8 7.8	3 4 4 3 5	24 24,0 25 16,3 26 52,1 29 40,7 29 41,7	3,023 3,129 9 3,459	,5973 ,6017 ,6357	,7302 ,7283 ,7513	,4804 ,4954 ,5389	
606 607 608 609 -610	Cancri Pixid Naut. 4 Leo. Min. Cancri	8 7 8 7 8 8	1 2 2 3 2	29 43,7 30 4,5 30 7,3 30 15,9 50 53,2	0   2,555 9   3,742 9   3,466	6547 6831 66,6383	,7689 ,7969 ,7515	,4 <b>0</b> 74 ,5731 ,5398	
611 612 613 614 615	Cancri Monocer. Cancri 10 Hydræ Lyncis	8 9 8 7 9.10	4 2 3 3 5	31 47,0 35 33,4 36 8,8 36 19,9 36 33,3	2 2,948 9 3,433 0 3,182	6251 6491 6266	,7177 ,7392 ,7162	,5357 ,5027	+7,6877 -8,17 <b>0</b> 4 -7,1647
616 617 618 619 620	Cancri Navis	8 7.8 8.9 9 8		37 3,8 37 29,1 38 53,3	3,035 3 3,27 3 2,149	6260 2 ,6350 2 ,7589	,7127 ,7202 ,8389	,4817 ,5148 ,3308	$\begin{array}{c c} +7,1724 \\ -7,9227 \end{array}$
621 622 623 624 625	Cancri Navis Pixid Naut.	8 9 7 7 6.7	4 3 3 4 4	41 39,8 42 14,8 43 10,3	3,410 54 2,150 21 <b>2</b> ,51	6595, 9   ,765; 1   ,6970	,8324 7604	,5327 ,3342 ,3998	7   — ,1636 2   + ,5914 3   + ,3808
626 627 628 629 630	Cancri	7.8 7.8 9 8	3	44 31, 44 35, 44 37,	01 3,44 04 3,39 73 3,33	5 ,6710 7 ,6647 7 ,6578	7 ,7291 7 ,7228 3 ,7153	5379 5   ,5311 3   ,5234	2  8,2167 1  8,1582 4  8,0713

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logariti	nms of		zi No.	Annual	P. M.
	0.05.	-	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
586	3	-46 9 18,92	10,542	+9,9605	+9,5791	1,0229	9,9297	29	+,016	+0,03
587	4	+ 9 54 10,25	10,587	+9,4487	-8,9581	,0247	,9290	26	+,007	,20
588	4	+27 32 56,11	10,592	7,9031	-9,3881	,0249	,9289	24	+,010	,01
589	3	+53 42 4,49	10,617	9,6 <b>2</b> 94	-9,6302	,0260	,9285	23	+,004	,03
590	4	+ 9 40 0,61	10,696	+9,4564	-8,9523	,0292	,9272	34	+,010	,10
591	4	+ 9 39 14,55	10,742	+9,4579	8,9538	—1,0314	9,9263	36	+,007	- ,14
592	1	-15 46 56,30	10,774	+9,8109	+9,1650	,0324	,9259	39	+,024	- ,08
593	2	+11 10 47,32	11,033	+9,4216	9,0278	,0427	,9216	48	+,016	+ ,04
594	3	+18 39 24,39	11,082	+9,1614	9,2471	,0446	,9208	51	+,023	+ ,02
595	4	+28 35 32,12	11,276	—8,1761	9,4300	,0521	,9174	61	+,003	+ ,01
596	3	+25 4 0,19	11,290	+8,6335	9,3778	1,0527	—9,9171	66	-,003	- ,25
597	4	+ 8 10 55,46	11,362	9,4955	8,9059	,0555	,9158	70	+,010	- ,06
598	3	-23 31 3,76	11,368	9,8615	+9,3550	,0556	,9157	74	+,005	- ,02
599	3	- 1 58 42,74	11,530	9,6646	+8,2990	,0618	,9127	81	-,001	- ,02
600	4	-18 57 21,63	11,796	9,8280	+9,2816	,0717	,9077	94	+,001	+ ,07
601	4	- 2 37 38,78	11,823	+9,6721	+8,4330	—1,0727	9,9071	97	+,018	- ,06
602	4	- 2 25 18,28	11,884	+9,6702	+8,4010	,0750	,9059	100	+,011	- ,02
603	4	+ 3 18 9,78	11,997	+9,5877	8,5351	,0791	,9037	107	+,004	- ,04
604	2	+ 20 14 47,66	12,192	+9,1238	9,3230	,0861	,8997	118	+,021	- ,10
605	4	+ 33 17 69,65	.12,197	—8,8573	9,6237	,0862	,8996	117	+,009	- ,04
606 607 608 609 610	3 4 4 2	+20 9 -25 60 52,38 +32 30 59,00 +20 39 32,10 +20 6 19,29	12,197 12,216 12,225 12,234 12,280	+9,1271 +9,8669 -8,7781 +9,1038 +9,1367	9,3214 + ,4247 ,5155 ,3326 ,3230	—1,0862 ,0869 ,0872 ,0876 ,0892	—9,8996 ,8992 ,8990 ,8988 ,8978	119 125 120 121 128	+,015 +,006 +,005 +,015 +,019	- ,03 + ,05 ,00 - ,14
611 612 613 614 615	1 1 4 3 4	+21 3 15,01 - 6 38 0,48 +19 24 24,55 + 6 16 14,69 +53 31 28,64	12,340 12,597 12,613 12,650 12,641	+9,0864 9,7168 9,1790 9,6366 —9,5623	9,3446 +9,8609 9,3212 8,8382 9,7062	-1,0913 ,1002 ,1018 ,1021 ,1029	—9,8965 ,8909 ,8899 ,8897 ,8892	135 151 156 157 153	+,004 -,009	+ ,08 ,05 ,05 + ,04 ,06
616	3	- 2 0 34,83	12,700	+9,6637	+8,3482	—1,1038	-9,8885	159	+,001	- ,00
617	4	- 2 0 34,21	12,700	,6637	+8,3482	,1038	,8885	160	+,004	- ,04
618	4	+11 11 15,93	12,727	,4407	-9,0904	,1047	,8879	161	+,001	- ,03
619	3	-42 1 44,45	12,817	,9227	+9,6316	,1078	,8858	169	+,024	- ,41
620	2	+13 11 46,41	12,879	,3944	-9,1660	,1099	,8844	171	+,024	+ ,02
621	4	+48 10 46,31	12,946	-9,4472	-9,6824	-1,1121	—9,8828	174	+,007	- ,23
622	2	+18 38 24,29	13,008	+9,2258	- ,3164	,1142	,8813	181	+,021	+ ,06
623	2	-41 51 37,70	13,039	9,9191	+ ,6377	,1152	,8805	187	+,023	+ ,05
624	2	-28 51 18,50	13,106	9,8722	+ ,4992	,1174	,8789	188	+,023	+ ,12
625	4	-32 10 16,96	13,106	9,8865	+ ,5419	,1174	,8789	190	+,003	- ,02
626	2	-39 48 50,62	13,128	+9,9122	+9,6219	—1,1182	—9,8783	194	+,009	- ,07
627	4	+20 34 56,12	13,198	,1523	,3642	,1205	,8766	195	-,004	- ,01
628	5	+18 9 38,43	13,203	,2504	,3121	,1206	,8765	196	+,009	- ,01
629	4	+15 1 22,53	13,207	,3502	,2323	,1208	,8763	197	+,023	- ,13
630	4	+ 9 2 11,99	13,237	,4928	,0150	,1218	,8756	<b>200</b>	+,021	+ ,03

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No.	Star's name and	Mag.	No.	Right Ascension	Annual Preces-		Logarit	hms of	
				Jan. 1, 1836.	sion.	a	<i>b</i>	c	d .
633 634	Hydræ seq. 2,17 ————————————————————————————————————	9 9 7 9	4 4	h. m. s. 8 45 10,21 47 27,55 47 51 40,09	2,940 3,393 3,036	,6523 ,6709 ,6577	+8,7049 ,6991 ,7175 ,6885	,4683 ,5306 ,4823	
636 637 638 639 649	Hydræ Cancri	9 8.9 8 8.9 9	3 4 3 4 2	52 58,72 53 9,68 53 18,01 53 56,18 54 14,70 54 22,63	3,175 3,054 2,937 3,324	8,6631 ,6608 ,6660 ,6773	,6881 +8,6882 ,6854 ,6882 ,6983 ,7397	,4823 +0,5017 ,4849 ,4679 ,5217 ,5556	7,7023 +6,8321 +7,7958 -8,0851
641 642 643 644 645	Lyncis Monocer. 74 Cancri Hydræ Navis	9.10 8 9 8.9 8.9	1 3 3 4 4	55 25,20 55 52,49 59 3,95 59 43,61 9 0 37,53	2,833 3,328 3,038	,6785 ,6878 ,6735	,6934 ,6906	+0,5853 ,452 <b>2</b> ,52 <b>22</b> ,4826 ,3416	-8,1105 +7,1746
646. 647 648 649 650	Pix. Naut.  Hydræ  Monecer.  Hydræ	7 8 8 7 9	4 4 4 1	1 29,47 2 34,18 4 19,31 4 28,42 4 50,19	2,630 2,967 2,748	,7218 ,6844 ,7066	,6650	,4200 ,4723 ,4390 ,4969	+7,7225 +8,2211
651 652 653 654 655	Hydree Navia	9 7.8 8 8 7.8	5 4 4 4 3	4 54,08 5 14,22 6 17,41 6 31,62 6 59,00	2.825 2,839 3,006	,6979 ,6984 ,6868	+8;7086 ,6775 ,6739 ,6612 ,7627	+0,5454 ,4510 ,4532 ,4780 ,3720	+8,1038 +8,0826 +7,5138 +8,6785
656 657 658 659 660	Cancri Hydra Navia Hydræ Leonis	8 7 7.8 7 8.9	2 1 4 4	7 14,29 7 30,90 9 19,87 9 21,25 10 25,12	2,939 2,388 2,844	,6919 ,7880 ,7037	,6625 ,7521 ,6675	,4682 ,3780 ,4539	+7,8390
661 662 663 664 665	Hydree	7.8 6.7 7 7 7.8	3 3 4 4 4	11 13,83 11 48,85 12 11,72 12 20,95 12 21,07	2,826 3,081 2,928	,7104 ,6957 ,7012	,6648	+0,4997 ,4512 ,4887 ,4666 ,5168	-7,7070 +8,1281 -6,8754 +7,8915 -8,0862
666 667 668 669 670	Hydræ Ursæ Maj. Hydræ	8.9 9.10 8.9	3 2 3 4 3	13 10,21 14 42,13 15 43,32 16 1,76 16 47,58	3,133 2,996 4,056	,7030 ,8804	+8,6615 ,6443 ,6424 ,8186 ,6403	,4960 ,4765	+7,6134 -8,7546
671 672 673 674 675	Hydræ Leonis h Ursœ Maj. Hydræ	9 8 7 8.9 8.9	3 3 4 3 4	17 18,57 17 31,55 18 31,84 20 49,61 22 44,07	3,340 4,821 3,038	9,0605 8,7101	+8,6396 ,6573 ,9890 ,6298 ,6269	,6831 ,48 <b>2</b> 6	+7,7034 8,2001 9,0133 +7,2637 +7,6603

No.	No.	Declination	Annual Preces-		Logarit		gi No.	Annua	1 P. M.	
2.00	Obs.	Jan. 1, 1836.	sion.	a'	<i>b</i> ′	c.	ď	Piazzi	A.R.	Decn.
631 632 633 634 635	3 4 3 4 4	+ 9 2 4,75 - 7 20 49,85 +18 6 21,48 - 1 54 49,83 - 1 55 15,68	13,237 13,390 13,394 13,661 13,746	+9,4928 ,7202 ,2553 ,6609 ,6609	-9,0150 +8,9318 -9,3173 +8,3578 +8,3605	-1,1218 ,1268 ,1269 ,1355 ,1382	9,8756 ,8716 ,8715 ,8644 ,8620	201 215 213 228 235	+,007 +,019 +,008 -,005	+0,04 -,08 +,02 +,02 +,01
636 637 638 639 640	4 4 4 4 4	+ 6 17 31,68 - 0 50 14,09 - 7 43 52,24 +14 49 33,88 +28 32 32,57	13,759 13,768 13,803 13,828 13,834	+9,5453 9,6484 9,7226 9,3692 8,5441	-8,8758 +8,0082 +8,9679 -9,2465 -9,5184	-1,1386 ,1388 ,1400 ,1407 ,1410	-9,8616 ,8614 ,8603 ,8597 ,8595	236 237 238 240 239	+,021 +,018 +,012 +,045 +,010	+ ,04 - ,14 - ,06 - ,17 - ,03
641 642 643 644 645	3 4 4 4	+39 5 27,58 -13 47 30,70 +15 22 1,20 -1 49 4,83 -42 50 35,69	13,902 13,928 14,128 14,169 14,223	9,0682 +9,7723 9,3617 9,6590 9,3015	-9,6408 +9,2189 -9,2709 +8,3604 +9,6836	,1439 ,1501	9,8575 ,8568 ,8509 ,8496 ,8480	243 246 257 260 266	,020 +,010 +,039 +,010 ,000	+ ,11 + ,16 - ,13 + ,03 + ,11
646 647 648 649 650	3 4 4 4 3	-25 10 47,03 -25 8 29,02 - 6 15 40,45 -19 4 50,14 + 4 29 41,06	14,275 14,341 14,450 14,458 14,479	+9,8401 ,8388 ,7060 ,8035 ,5786	+9,4815 +9,4830 +8,8960 +9,3726 -8,7518	,1599 ,1601	—9,8463 ,8442 ,8407 ,8405 ,8398	268 5 10 13 15	+,001 +,018 +,020 +,011 +,019	- ,12 - ,11 - ,07 + ,06 - ,09
651 652 653 654 655	3 4 4 4	+25 41 13,17 -14 44 56,82 -14 1 9,97 - 3 51 47,95 -37 56 28,71	14,487 14,502 14,567 14,583 14,607	+8,9636 9,7762 9,7686 9,6803 9,8825	-9,4956 +9,2653 +9,2456 +8,6889 +9,6514	—1,1610 ,1614 ,1634 ,1638 ,1646	—9,8395 ,8390 ,8369 ,8363 ,8356	12 16 21 22 26	+,015 +,009 +,007 +,014 +,014	- ,01 - ,01 + ,05 - ,02 + ,02
656 657 658 659 660	4 1 4 4	+19 29 20,79 - 8 3 47,16 -36 56 59,11 -13 53 29,41 +27 51 9,29	14,627 14,643 14,747 14,750 14,817	+9,2577 9,7210 9,8774 9,7664 8,8388	-9,3863 +9,0108 +9,6457 +9,2479 -9,5382	,1688	—9,8349 ,8343 ,8308 ,8306 ,8283	25 27 44 39 45	+,001 -,001 +,015 +,016 -,011	- ,02 + ,07 ,00 + ,04 - ,02
661 662 663 664 665	4 4 4 4	+ 5 54 19,27 -15 8 41,30 + 0 52 23,41 - 8 55 3,37 + 13 48 24,11	14,860 14,897 14,918 14,927 14,927	+9,5599 ,7738 ,6274 ,7261 ,4183	-8,8808 +9,2887 -8,0515 +9,0623 -9,2494	,1730 ,1737 ,1739	—9,8268 ,8255 ,8247 ,8244 ,8244	49 52 54 56 55	+,012 +,017 +,015 +,013 +,018	- ,01 + ,17 ,00 + ,03 - ,06
666 667 668 669 670	2 4 4 4	-14 55 19,84 + 4 12 - 4 39 46,03 + 48 28 35,68 + 4 59 13,07	14,973 15,006 15,123 15,142 15,182	+9,7716 + ,5865 + ,6866 - ,3063 + ,5740	+9,2840 -8,7407 +8,7881 -9,7523 -8,8168	1,1753 ,1780 ,1796 ,1802 ,1814	-9,8227 ,8193 ,8171 ,8164 ,8147	59 64 71 70 76	+,022 +,010 -,006 -,002 +,004	- ,26 - ,04 - ,02 - ,08
671 672 673 674 675	4 4 4 2 3	- 5 42 3,73 +17 24 17,03 +63 46 22,45 - 2 2 15,93 - 4 56 52,16	15,213 15,226 15,287 15,413 15,618	+9,6964 + ,3424 ,5888 + ,6599 + ,6876	+8,8773 -9,3559 -9,8362 +8,4395 +8,8248	1,1823 ,1826 ,1843 ,1879 ,1908	9,8136 ,8131 ,8108 ,8056 ,8014	80 79 82 95 102	+,009 +,017 +,055 +,021 +,012	- ,09   + ,08   - ,01   - ,05   - ,16

No.	Star's name and l	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarithms of			
				Jan. 1, 1836.	sion.	a	ь	c	d	
676	Leonis	5	4	h. m. s. 9 23 41,26	*. +3,536	-8,7728	+8,6815	+0,5485	.—8,4595	
677	Hydræ	8	4	24 12,59	3,105		<b>,</b> 62 <b>2</b> 3	,4921	7,3666	
678	Sextantis	9	4	25 57,75	3,198	,7230	,6228	,5049	7,9125	
679	Leo. Min	6.7	4	26 57,93	3,582	,7903	,686 <b>2</b>	,6541	8,5131	
680		8.9	4	29 8,52	3,556	,7888	,6763	,5510	8,4992	
681	Hydræ	8.9	5	29 13,37	3,102			+0,4916	<b>7,3479</b>	
682		8	4	29 50,12	3,104	,7239			7,3750	
683	Leo. Min Leonis	7 8	4	31 52,04	3,570		,6744 ,6662		8,522 <b>3</b> 8,5041	
684 685	Sextantis	9	4	33 6,08 34 56,40		,7943 ,7314				
000	Coatantis	•	•	04 00,40		,,,,,,,,	1	1	'	
686	Leonis	7	4	37 2,29	3,371	<b>8,7641</b>	+8,6203			
687	Antl. Pneum.		2	37 4,86	2,753		,6227			
688 689	Sextantis	7.8 7	3	37 28,61					+8,1393 $-7,3778$	
690	Gextallus	7.8	4	37 55,78 38 6,02	3,102 3,101					
ĺ	_						1		•	
691	Sextantis	8	4	40 24,98	<b>2,</b> 980	<b>—8,7409</b>	+ 8,5837	+0,4742		
692	Leonis	8 7	4	40 50,82	3,428		,6234 ,5852	,5088	-8,4133 -8,0609	
693 694	Sextantis	8.9	4	41 4,03 42 57,86	3,227 3,054	,7484 ,7415				
695		7	4	45 18,20	2,948	,7499	,5729	,4695		
696	Sextantis	8	2	<b>45 29,</b> 32	3,142	8 7467	+8,5689	+0,4972	_7,7438	
697	Leonis	8.9	4	46 14,45	3,170	,7497	,5686	,5011	_7,8879	
698	Sextantis	7.8	3	47 12,21	2,935	,7538	,5648	,4676	+8,0055	
699		7.8	4	47 14,99	3,176	,7516	,5663	,5019	<b>-7,9179</b>	
700	Leonis	8.9	4	48 59,95	3,490	,8128	,6201	,5428	-8,5157	
701	Sextantis pre	. 7.8	4	49 23,26	3,053	-8,7495	+8,5554	+0,4847		
702	seq.	8	4	49 28,06	3,053			,4847		
703		7.8	4	50 14,72	3,138		,5548	,4966		
704 705	Hydræ	7.8 7.8	4	52 41,28 54 36,46	3,038 2,914	,7538 .7661	,5457 ,5600		+7,3788 +8,1025	
700	Hyuræ	7.0	-	32 33,33	,	,7001	,0000	,1040	1	
706	Leonis	8	4	54 49,76	3,198	8,7635	+8,5462	+0,5049	<b>8,0309</b>	
707	Sextantis	7.8	4	55 6,81	3,125	8,7577	,5393	,4948	7,6758	
708	Urse Maj	8 8	4	55 46,18	4,104	9,0144	,7929 ,5299	,6132 ,4939	8,9352 7,630 <b>5</b>	
709 710	Sextantis Leonis	8	3 4	58 0,40 10 2 48,89	3,118 3 <b>,21</b> 6	8,7606 8,7756	,5238		8,1216	
			İ					İ		
711	Urs. Min.	8	2	9 29,30		<b>9,2317</b>	+8,9491	+0,6758	<b>-9,2039</b>	
712	Leo. Min.	7.8 8	4	9 38,15	3,215	8,7847	8,50+1 9,5631	0,5072 1,0158		
713 714	Camelop. Leonis	8	4 4	10 9,99 10 54,00	10,371 3,306	9,8518 <b>8,80</b> 33			<b>—8,3616</b>	
715	Ant. Pneum.	8.9	2	11 36,23	2,743	8,8283	8,5364	0,4382	+8,5023	
716	Leonis	8.9	4	13 34,98	3,266	8 <b>,</b> 79 <b>8</b> 0	+8,4970	+0,5140	8.2053	
717	Antl. Pneum.		3	14 50,81	2,744	,8338	,5267	4384	+8.5159	
718	Hydræ	neb.	4	16 52,94	2,882	7999	,4830	.4597	+8,2860	
719	Sextantis	8.9	4	19 37,12	3,049	,7812	,4509	,4842	+7,3018	
720	Antl. Pneum.	9	4	22 2,89	2,714	,8575	,5152	<b>.43</b> 36	+8,5887	

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	ams of		zzi No.	Annual	Р. М.
	O os.	. Jan. 1, 1650.	sion.	a'	b'	·c'	d'	Piazzi	A. R.	Decn.
676 677 678 679 680	5 3 4 4 4	+29 5 26,00 + 2 35 12,75 + 8 54 46,76 +31 53 34,92 +30 53 13,85	"  15,573   15,599   15,698   15,751   15,866	+8,8751 9,6085 9,5224 8,6128 8,7634	9,5871 8,5422 9,0834 9,6181 9,6088	-1,1924 ,1931 ,1958 ,1973 ,2005	—9,7990 ,7979 ,7937 ,7913 ,7860	109 114 119 124 131	s. -,004 +,014 +,007 +,002 +,027	,01 ,00 ,00 ,02 ,02 ,01
681	4	+ 2 25 41,39	15,872	+9,6107	8,5236	1,2007	-9,7858	134	+,007	+ ,04
682	3	+ 2 34 22,10	15,905	9,6096	8,5507	,2015	,7843	138	-,007	+ ,05
683	4	+32 1 11,30	16,017	8,6902	9,6268	,2046	,7790	145	+,005	+ ,11
684	4	+30 51 19,04	16,078	8,8261	9,6140	,2062	,7761	155	-,001	+ ,05
685	4	+ 3 22 26,35	16,171	9,6010	8,6734	,2087	,7715	161	+,004	+ ,08
686	4	+21 14 30,95	16,280	+9,2856	-9,4686	-1,2117	9,7659	165	+,018	+ ,06
687	3	-22 0 6,89	16,280	,7924	+9,4836	,2117	,7659	167	-,018	- ,01
688	3	-26 52 42,35	16,298	,8129	+9,5657	,2121	,7650	170	+,015	,00
689	4	+ 2 32 27,34	16,324	,6117	-8,5534	,2128	,7636	171	+,004	- ,03
690	4	+ 2 28 22,01	16,335	,6117	-8,5420	,2131	,7631	172	+,015	- ,01
691	4 4 4 4	- 6 33 34,95	16,449	+9,6964	+8,9735	-1,2161	—9,7570	180	+,021	+ ,02
692		+25 19 12,21	16,472	,1732	9,5456	,2167	,7557	183	+,010	- ,02
693		+11 52 13,26	16,485	,4885	9,2276	,2171	,7550	184	+,010	- ,09
694		- 1 5 21,14	16,578	,6474	+8,2008	,2195	,7498	192	+,003	- ,05
695		- 9 8 2,62	16,688	,7126	+9,1219	,2224	,7434	203	+,018	+ ,02
696 697 698 699 700	4 4 4 4	+ 5 43 + 7 56 34,24 -10 15 45,08 + 8 27 8,53 +30 18 44,70	16,698 16,736 16,781 16,784 16,870	+9,5763 ,5490 ,7202 ,5428 ,0128	-8,9177 -9,0598 +9,1745 -9,0892 -9,6280	—1,2227 ,2237 ,2248 ,2249 ,2271	9,7428 ,7405 ,7378 ,7377 ,7324	204 206 210 208 214	+,008 +,017 +,025 +,013 +,017	,14 ,07 ,00 ,18
701	3	- 1 9 50,84	16,885		+8,2405	1,2275	9,7314	219	+,008	+ ,03
702	4	- 1 10 4,47	16,889		+8,2406	,2276	,7312	220	+,010	,01
703	4	+ 5 35 23,42	16,926		-8,9134	,2286	,7288	222	+,011	,05
704	4	- 2 24 17,09	17,041		+8,5545	,2315	,7214	228	+,012	,01
705	4	-12 30 31,08	17,126		+9,2682	,2337	,7156	232	+,004	+ ,07
706 707 708 709 710	4 4 4 4	+10 41 20,69 + 4 45 32,69 +56 27 9,11 + 4 16 20,90 +12 50 30,71		+9,5185 + ,5899 ,2765 + ,5966 + ,4983	9,1994 8,8504 9,8539 8,8 <b>0</b> 54 9,2868	1,2340 ,2343 ,2351 ,2375 ,2427	9,7148 ,7139 ,7116 ,7048 ,6890	234 235 236 243 4	+,010 +,012 +,004 -,001 +,017	- ,05 - ,14 + ,02 - ,18 - ,07
711	2 4 4 3 3	+69 44 44,48	17,770	-9,4533	9,9199	-1,2497	—9,6651	30	+,007	- ,10
712		+13 26 25,43	17,770	+ ,4983	,3133	,2497	,6651	34	+,010	- ,10
713		+85 13 44,30	17,824	- ,6228	,9475	,2510	,6602	14	-,016	- ,02
714		+21 13 31,79	17,821	+ ,3802	,5072	,2509	,6605	37	+,007	+ ,07
715		-28 8 22,75	17,851	+ ,7767	+ ,6237	,2517	,6578	43	+,011	+ ,08
716	4	+18 20 25,21	17,928	+9,4330	-9,4488	—1,2535	—9,6505	50	+,011	- ,10
717	3	-28 43 55,36	17,977	,7730	+9,6349	,2547	,6457	56	+,012	+ ,16
718	4	-17 48 46,15	18,056	,7372	+9,4407	,2566	,6377	68	+,038	- ,07
719	4	- 1 52 45,52	18,158	,6513	+8,4776	,2591	,6268	81	+,012	- ,10
720	4	-32 34 13,81	18,246	,7701	+9,6904	,2612	,6169	92	+,028	+ ,04

No.	Star's name and M		vo.	Right Ascension	Annual Preces-		Logarit	hms of	
			03.	Jan. 1, 1836.	sion.	a	<i>b</i>	c	d
721 722 723 724 725	Ursæ Maj.  Hydræ  2 Navis Antl. Pneum.	8 8 8 6.7 8	4 4 3 4 4	h. m. s. 10 22 28,51 23 42,44 24 38,07 24 58,27 25 22,19	2,545		,6254 ,4648	+0,5840 ,5701 ,4536 ,4057 ,4355	8,8608
726 727 728 729 730	Antl. Pneum.  Hydræ Leonis Sextantis	8 8.9 8 9	4 4 4 4	27 11,54 29 1,27 31 9,65 32 53,66 34 39,35	2,807 2,916 3,197	,8383 ,8093 ,8066	,4598 ,4194	,5047	+ 8,4926 + 8,2686 8,2143
731 732 733 734 735	Leo. Min. Antl. Pneum. Hydræ Sextantis Hyd. & Crat.	8 8 8 8 7	4 4 4	36 45,98 37 22,57 38 55,05 42 0,86 42 44,02	2,809 2,945 3,004	,8527 ,8112 ,8028	,4281 ,3776 ,3507	,4485 ,4691 ,4777	8,5815 +8,5362 +8,2213 +7,9544 +7,9485
736 737 738 739 740	Sextantis Leonis Ursæ Maj. Leonis	8 8.9 7 8.9 8	4 4 4 4	43 25,43 43 37,76 46 51,47 47 24,28 49 53,12	3,132 3,456 3,130	,8040 ,9365 ,8067	+8,3430 ,3422 ,4542 ,3210 ,3356	,4958 ,5386 ,4955	-8,7692 -7,9781
741 742 743 744 745	Leonis Ursæ Maj.	8 8.9 7.8 8 8	4 4 4 4	50 58,84 52 45,63 53 59,95 54 9,28 55 35,79	3,178 3,135 3,073	,8220 ,8124 ,8059	+8,3025 ,3005 ,2827 ,2751 ,3753	,5021 ,4962	8,259 <b>2</b> 8,0535 6,9323
746 747 748 749 750	Leonis Ursæ Maj.	8 7.8 8 7.8 7.8	3 4 1 4 3	55 37,52 55 56,46 58 4,71 58 39,39 59 22,59	3,156 3,118 3,137	,8190 ,8120 ,8164	,2756 ,2560 ,2530	,4939 ,4965	8,1883 7,9555 8,1003
751 752 753 754 755	Leo. Min. Leonis	7 7 7 8.9 8	4 4 5 3	59 54,68 11 0 0,69 3 14,05 5 55,92 6 7,77	3,181 3,323 3,077	,8309 ,9126 ,8120	,2575 ,3137	,5215 ,4481	8,3229 8,6997 7,3010
756 757 758 759 760	Leonis Crateris	7.8 7 8 8 8	3 4 3 4 4	9 4,70 9 47,63 10 26,23 11 26,02 13 2,57	3,134 3,037 3,038	,8245 ,8162 ,8166	+8,2911 ,1703 ,1559 ,1472 ,1325	+0,5185 ,4961 ,4824 ,4826 ,4901	[-8,1716]
761 762 763 764 765	Leonis Hydræ Ursæ Maj. Hydræ Leonis	7.8 8 7 7 8	4 3 4 4 2	14 37,21 14 53,75 15 26,96 15 51,61 17 14,70	2,88.4 3 369 2,888	8,9041 9,0030 8,9036	,2951 ,1923	,4598 ,5275 ,4606	-7,7588  +8,6666  -8,8840  +8.6646  -7,8819

No.	No.	Declination Jan. 1, 1836.	Annual Preces-		Logari	thms of		zi No.	Annus	al P. M.
	Obs.		sion.	a'	b'	c'	d'	Piazzi	A.R.	Decn.
791 722 723 724 725	4 5 3 4 3	+54 25 35,81 +50 1 14,71 -22 45 32,96 -44 13 29,33 -32 31 33,32	"-18,265 18,309 18,341 18,350 18,365	-8,9445 -8,5185 +9,7451 ,7723 ,7642		,2626 ,2634 ,2636	,6096 ,6056	88 96 103 107 108	s. +,011 +,027 +,007 -,004 +,022	-0,10 -,07 +,04 -,10 +,06
726 727 728 729 730	4 4 4 4 4	-32 55 8,09 -26 48 29,59 -16 43 31,34 +14 49 54,01 + 5 31 25,16	18,429 18,490 18,561 18,619 18,675	+9,7619 ,7490 ,7202 ,5119 ,5988	+9,6989 +9,6193 +9,4259 -9,3758 -8,9509	-1,2655 ,2669 ,2686 ,2699 ,2713	—9,5945 ,5865 ,5767 ,5685 ,5599	115 120 130 132 140	+,020 +,019 +,016 +,020 +,026	+ ,08 ,00 - ,01 - ,16 - ,18
731 732 733 734 735	2 4 4 3 4	+31 29 19,37 -28 49 24,41 -14 52 14,19 - 8 7 25,46 - 8 1	18,741 18,760 18,807 18,900 18,921	+9,2672 ,7404 ,7059 ,6785 ,6776	9,6885 +9,6548 +9,3825 +9,1260 +9,1203	—1,2728 ,2732 ,2743 ,2764 ,2769	9,5497 ,5467 ,5389 ,5224 ,5185	146 151 156 168 174	+,020 +,017 +,020 +,029 +,011	- ,01 + ,08 - ,22 - ,07
736 737 738 739 740	4 3 4 3 4	- 7 59 49,14 + 8 19 52,53 +42 53 6,50 + 8 33 10,80 +22 23 8,43	18,940 18,946 19,038 19,051 19,118	+9,6776 ,5821 ,0212 ,5832 ,4579	+9,1199 -9,1358 -9,8103 -9,1493 -9,6598	—1,2774 ,2775 ,2796 ,2799 ,2814	—9,5148 ,5137 ,4954 ,4923 ,4777	178 179 191 195 <b>20</b> 1	+,021 +,013 +,009 +,017 +,030	+ ,01 - ,15 - ,08 - ,11 - ,03
741 742 743 744 745	4 5 4 4 3	+10 48 29,25 +15 54 14,61 +10 3 8,36 + 0 47 9,28 +39 7 43,06	19,147 19,192 19,223 19,226 19,262	+9,5694 ,5289 ,5775 ,6335 ,2122	9,2522 9,4184 9,2229 8,1084 9,7827	—1,2821 ,2831 ,2838 ,2839 ,2847	9,4709 ,4597 ,4521 ,4512 ,4412	204 213 220 221 228		- ,06 - ,29 - ,16 - ,09 - ,01
746 747 748 749 750	4 4 3 4 4	+ 0 51 6,15 +13 32 59,92 + 8 1 19,14 +11 5 54,38 +55 2 12,87	19,261 19,270 19,311 19,334 19,352	+9,6335 ,5539 ,5944 ,5740 8,5563	8,1454 9,3521 9,1274 9,2682 9,8982	—1,2847 ,2849 ,2858 ,2863 ,2867	-9,4417 ,4394 ,4278 ,4209 ,4158	231 239 244	+,002 +,008 +,016	- ,08 - ,03 + ,03 - ,06 - ,28
751 752 753 754 755	4 4 5 4 1	- 1 0 59,40 + 18 5 41,90 + 37 46 53,61 + 1 46 47,94 + 13 30 50,84	19,363 19,364 19,437 19,492 19,497	+9,6425 ,5224 ,2856 ,6304 ,5658	+8,2411   -9,4770   -9,7737   -8,4768   -9,3562	-1,2870 ,2870 ,2886 ,2899 ,2899	-9,4120 ,4116 ,3877 ,3671 ,3655	251 5 15	-,006 +,019	- ,06 - ,11 - ,17 + ,01 - ,08
756 757 758 759 760	4 4 3 6 4	$\begin{array}{c} +36 & 20 & 18,46 \\ +12 & 52 & 52,38 \\ -6 & 0 & 49,89 \\ -6 & 0 & 9,30 \\ +4 & 50 & 1,70 \end{array}$	19,476 19,569 19,581 19,599 19,627	+9,3222 ,5740 ,6571 ,6571 ,6180	9,7600 9,3367 +9,0115 +9,0119 8,9150	-1,2895 ,2915 ,2918 ,2922 ,2928	-9,3734 ,3353 ,3 <del>2</del> 96 ,3208 ,3070	31 35 39	+,004 +,003	- ,05 - ,15 - ,12 - ,08 - ,08
761 762 763 764 765	5 4 4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	19,655 19,665 19,670 19,675 19,698	,6693 ,1335 ,6674	—8,9332  - +9,7541  - -9,8727  - +9,7529  - -9,0551	-1,2935  - ,2937 ,2938 ,2939 ,2944	-9,2921 ,2896 ,2838 , <b>2</b> 806 ,2667	51 - 52 - 57	-,001   - -,001   - +,015   -	- ,18 - ,19 - ,11 - ,18 - ,11

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No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logario	hms of	
			000.	Jan. 1, 1836.	sion.	а	ь	c	d
766 767 768 769 770	Leonis 17 Hydræ  Crateris	8 6.7 8 8 7.8	4 4 4 3	h. m. s. 11 22 30,50 24 9,19 24 22,98 25 17,51 26 1,26	s. +3,046 2,956 2,948 3,048 3,052	8,8240 ,8742 ,8815 ,8211 ,8206	+8,0345 8,0698 8,0754 8,0016 7,9925	+0,4837 ,4707 ,4695 ,4840 ,4846	   +7,8275   8,5513   8,5816   7,8143   7,7295
771 772 773 774 775	Hydræ Ursæ Maj. Crateris Hydræ	9 7 7.8 8 7.8	4 4 3 4 4	27 43,54 30 13,97 33 2,69 33 34,42 33 37,61	2,943 2,957 3,206 3,007 2,974	—8,9006 ,8953 ,9508 ,8532 ,8908	+8,0493 8,0088 8,0196 7,9132 7,9508	+0,4688 ,4708 ,5060 ,4781 ,4733	+8,6470 +8,6281 -8,7774 +8,4224 +8,6101
776 777 778 779 780	Leonis Ursæ Maj. Leonis Virginis Leonis	9 8 8 8	2 4 4 4 4	38 22,07 41 59,71 44 3,06 45 4,42 45 25,57	3,103 3,171 3,096 3,067 3,090	8,8389 ,9697 ,8417 ,8236 ,8379	+7,8104 ,8608 ,6790 ,6323 ,6367	,5012	
781 782 783 784 785	Virginis 65 Ursæ Maj. Leonis Virginis	7 7 7.8 9.10 8	4 4 4 4 4	45 39,99 46 26,91 46 32,47 46 56,64 47 0,72	3,076 3,068 3,151 3,089 3,070	—8,8253 ,8232 ,9924 ,8404 ,8235	+7,6159 ,5884 ,7533 ,6901 ,5710	+0,4880 ,4869 ,4984 ,4898 ,4871	-7,8273 +6,8054 -8,8591 -8,2807 -7,3627
786 787 788 789 790	Leonis Virginis Leonis Virginis	7.8 7.8 9.10 7 8.9	3 4 3 3	47 46,35 48 29,00 49 13,27 49 21,10 50 6,27	3,089 3,081 3,087 3,076 3,073	-8,8418 ,8321 ,8436 ,8276 ,8253	+7,5636 ,5266 ,5090 ,4875 ,4507	+0,4898 ,4887 ,4895 ,48°0 '4876	8,2981 8,1286 8,3173 7,9639 7,7854
791 792 793 794 795	Ursæ Maj. Virgi nis Corvi Leonis Hydræ	8.9 8 8 8 7.8	4 3 4 4 3	52 11,19 53 4,32 55 53,49 57 2,46 59 53,89	3,146 3,073 3,060 3,073 3,068	-9,1280 8,8 <b>2</b> 74 ,8513 ,8461 ,9042	+7,6488 7,2955 7,0859 6,9227 —5,6690	+0,4978 ,4876 ,4857 ,4876 ,4869	-9,0666 -7,9372 +8,3884 -8,3404 +8,6493
796 797 798 799 800	Ursæ Maj. Corvi Virginis	8.9 7.8 7 9.10 8	4 4 3 4 4	12 0 6,96 5 10,24 5 51,62 7 21,07 9 17,08	3,070 3,080 3,071 3,059 3,053	—9,0146 8,8529 ,8253 ,8329 ,8393	6,1773 7,2252 ,2482 ,3498 ,4555	+0,4871 ,4885 ,4873 ,4856 ,4847	-8,8980 +8,4023 +7,7509 -8,1417 -8,2616
801 802 803 804 805	*1 Virginis Comæ Ber. Virginis	7 8 9 7.8 8	5 4 4 4 3	9 44,74 9 45,08 14 40,88 16 10,39 16 18,02	3,071 3,048 3,041 3,060 3,058	8,8 <b>2</b> 41 ,8487 ,8427 ,8246 ,8251	7,4613 ,4859 ,6553 ,6800 ,6840	,4830	<b>—8,3686</b>
806 807 808 809 810	Virginis Centauri Virginis	7.8 8 9 8 8.9	3 3 4 4 4	17 33,04 18 44,63 19 17,83 19 22,85 19 53,94	3,059 3,137 3,057 3,071 3,033	—8,8243 ,8935 ,8242 ,8225 ,8405	-7,7138 ,8115 ,7544 ,7541 ,7863	+0,4856 ,4965 ,4853 ,4873 ,4819	7,7718 +8,6162 7,7897 +7,2365 8,2938

No.	No. Obs.	Declination	Annual Preces-		Logarith	ms of		zi No.	Annual	Р. М.
	Obs.	Jan. 1, 1836.	sion.	a'	<b>b</b> '	c'	d'	Piazzi	A. R.	Decn.
766 767 768 769 770	4 4 4 3	- 5 48 55,68 -28 21 51,31 -30 4 6,57 - 5 37 56,65 - 4 37 22,27	-19,779 19,801 19,802 19,817 19,826	+9,6513 ,6590 ,6551 ,6503 ,6484	+9,0013 ,6717 ,6948 8,9883 ,9041	1,2962 ,2967 ,2967 ,2970 ,2972	-9,2092 ,1903 ,1887 ,1756 ,1672	91 95 97 104 108	+,021 +,002 +,013 +,008 +,011	-0,06 + ,17 ,19 ,17 ,11
771 772 773 774 775	4 4 4	-33 52 47,08 -32 41 51,28 +42 8 53.89 -21 44 37,22 -31 34	19,847 19,877 19,907 19,913 19,913	+9,6415 ,6385 ,3874 ,6484 ,6335	+9,7422 + ,7291 - ,8237 + ,5663 + ,7165	-1,2977 ,2983 ,2990 ,2991 ,2991	—9,1444 ,1099 ,0659 ,0572 ,0572	112 127 137 142 143	+,023 +,012 +,051 +,005 +,015	,00 ,02 ,07 ,06
776 777 778 779 780	4 4 4 4	+15 54 45,01 +44 34 15,58 +16 45 50,49 - 2 58 15,36 +14 56 28,42	19,957 19,982 19,996 20,002 20,004	+9,5933 ,4065 ,5977 ,6365 ,6064	—9,4353 —9,8447 —9,4587 +8,7179 —9,4098	-1,3001 ,3007 ,3009 ,3011 ,3011	—8,9696 ,8898 ,5363 ,8078 ,7979	155 165 169 173 177	-,003 +,026 +,012 +,009 +,007	,00 ,10 ,07 ,04 ,17
781 782 783 784 785	3 4 1 3	+ 5 47 26,33 - 0 31 33,81 +47 23 22,81 +16 1 26,63 + 2 0 39,83	20,005 20,009 20,010 20,011 20,012	+9,6345 ,6385 ,4014 ,6042 ,6375	9,0012 +7,9815 9,8660 9,4596 8,5385	-1,3011 ,3012 ,3012 ,3013 ,3013	8,7898 ,7645 ,7601 ,7490 ,7468	180 182 183 186 187	+,018 +,015 +,016 +,022 +,018	- ,09 - ,47 ,00 - ,07 - ,04
786 787 788 789 790	3 4 4 4 4	+16 38 38,71 +11 26 30,09 +17 20 39,71 + 7 53 23,50 + 5 15 17,53	20,015 20,019 20,021 20,022 20,026	+9,6031 ,6191 ,6021 ,6274 ,6314	9,4557 ,2960 ,473 <b>2</b> ,1358 8,9597	-1,3014 ,3014 ,3015 ,3016 ,3017	-8,7212 ,6940 ,6650 ,6595 ,6250	194 197 198 201 205	+,021 +,006 +,025 +,021 +,002	- ,06 - ,02 - ,01 - ,14 - ,23
791 792 793 794 795	4 4 4	+60 15 53,62 + 7 25 9,72 -20 7 33,69 +18 12 16,98 -33 45 38,73	20,032 20,036 20,040 20,041 20,043	+9,2695 ,6294 ,6159 ,6107 ,5575	-9,9384 - ,1097 + ,5371 - ,4942 + ,7451	—1,3019 ,3019 ,3019 ,3019 ,3020	-8,5205 ,4680 ,2346 ,0765 +6,7648	210 215 225 229 240	+,018 +,016 +,005 +,006 -,006	- ,12 - ,01 - ,19 - ,11 + ,13
796 797 798 799 800	4 4 4 4	+49 52 48,87 -20 43 21,41 - 4 48 36,73 +11 46 49,73 +15 21 19,08	20,038 20,037 20,035	+9,4456 ,5999 ,6345 ,6355 ,6325	-9,8834 +9,5492 +8,9255 -9,3086 -9,4219	-1,3020 ,3018 ,3018 ,3017 ,3016	+7,1627 8,3722 ,4227 ,5167 ,6159	242 14 17 23 30	,000 +,023 -,004 +,009 +,003	- ,25 - ,11 - ,01 + ,04 - ,16
801 802 803 804 805	4 3 4 4 3	- 3 2 33,22 +19 20 49,26 +17 9 19,59 + 5 14 26,64 + 5 57 26,29		+ 9,6355 ,6263 ,6375 ,6425 ,6425	+8,7279 -9,5195 9,4683 8,9575 9,0133		+8,6368 ,6368 ,8117 ,8543 ,8578	32 34 62 72 73	+,007 +,011 +,014 +,014 +,013	+ ,05 ,08 ,07 ,22 ,31
806 807 808 809 810	1 1 4	+ 5 6 27,82 -31 52 4,46 + 5 19 - 1 28 9,48 +16 31 36,39	19,983 19,975 19,971 19,971 19,966	+9,6425 ,5366 ,6434 ,6365 ,6444	8,9461 +9.7213 8,9639 +8,4115 9,4517	—1,3007 ,3005 ,3004 ,3004 ,3003	+8,8882 ,9165 ,9286 ,9301 ,9432	77 82 86 89 94	+,004 ,005 +,015 +,002 +,010	- ,20 ,00 - ,25 + ,04

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
				Jan 1, 1836.	sior.	а	ь	c	d
011	G			h. m. s.	//   0.00	0 0514	7 9901	104701	9 5050
811	Comæ Ber.	8	4	12 20 32,78	+3,007	-8,8714	-7,8291	+0,478 <b>1</b> 4944,	8,5252  +8,4459
812	Corvi	6	2	21 43,52 23 20,41	3,122	,8573	,8396	,4830	
813	Virginis	7.8	4		3,041	,8299	,8429	,4824	8,1855
814 815	Corvi	8 8	2	23 22,31 25 12,44	3,037 3,130	,8329 ,8560	,8472 ,9025	,4955	+8,4413
010	COLAI	O	~	20 12,41	0,100	,0000	,5020	,1000	+0,1110
816	Can. Ven.	7	4	25 42,45	2,965	-8,9039		+0,4720	<b>8,6545</b>
817	1 Comæ Ber.	7.8	4	26 52,72	3,013	,8459	,9202	,4790	
818	Corvi	8	4	28 1,14	3,114	,8367	,9290	,4933	+8,2636
819	Virginis	9	4	28 46,98	3,022	,8357	,9403	,4803	
820		6	1	30 55,13	<b>3,</b> 09 <b>0</b>	,8233	,9590	,4900	+7,9183
821	Virginis	7.8	4	<b>32 28,</b> 62	3,022	8,8319	-7,9961	+0,4803	<b>—8,20</b> 32
822	Can. Ven.	7	4	34 30,29	2,854	,9831	8,1662	,4554	
823	Comæ Ber.	7.8	3	34 35,75	2,955	,8780	,0628	,4706	
824	Virginis	8.9	3	35 10,69	3,055	,8195	,0118	,4850	
825		7.8	5	35 46,58	3,075	,8188	,0185	,4878	+7,3543
006	Vinninin	0.0		38 8,79	2.000	<b>—8,</b> 8178	0.0160	+0,4869	<b>-5</b> ,758 <b>7</b>
826	Virginis	8.9	4 4		3,069		<b>8,015</b> 3		
827	Come Pon m	. 8	2	38 16,62	3,068	,8178	,0468	,48∂9 ,4735	-6,3954 -8,3777
828	Comæ Ber. pr	e. 0 10	4	43 47,65	2,975	,8430	,1316	,4728	<b>—8,4007</b>
829 830	Can. Ven.	10	4	43 55,92 44 46,98	2,970 <b>2,</b> 782	,845× ,9870	,135 <b>8</b> ,2857	,4444	<b>—8,8557</b>
		9.10	4	·		<b>—8,8180</b>	<b>—</b> 8,1284	·	+7,8871
831 832	Virginis	7.8	3	45 57,15 47 17,31	3,100	-0,6160 ,8247	,1472		-8,1561
833		8.9 ×	4	47 17,52	3,008	,×268	,1493	,4774	8,1961 8,1961
834		7.8	4	48 27,22	3,002	,8448	,1784	,5021	+8,4050
835	Centauri	8	3	49 55,90	3,178 3,253	,8876	,2345	,5123	+8,6182
					·	,		·	
836	Virginia .	7	4	<b>5</b> 3 <b>8,6</b> 3	3,055	-8,8124	-8,1872	+0,4850	<b>—7,4</b> 313
837	Centauri	8	4	54 1,38	3,276	,8902	,2722		+8,6313
838	Comæ Ber.	7	4	55 3,56	2,926	,8515	,2414	,4663	
839	Virginis	9	3	55 47,53	3,034	,8132	,2100	,4820	<b>-7.8361</b>
840		7.8	4	55 47,79	2,999	<b>,82</b> 06	,2176	,4770	-8,1420
841	· Virginis	8	4	56 22,48	3,062	<b>8,8106</b>	-8,2122	+ 0,4860	<b>-7,1132</b>
842		9	4	<b>56 49,96</b>	3,110	8,8138	,2191	,4928	+7,9169
843	Ursæ Maj.	8	4	57 16,34	2,598	9,0495	,4580	,4146	<b>-8,9619</b>
844	Virginis	8.9	4	57 25,79	3,038	8,8116	,2217	,4896	-7,7476
845		9	3	57 54,91	3,040	8,8113	<b>,22</b> 50	,4829	-7,7354
846	Centauri	7.8	3	<i>5</i> 7 56,35	3 288	8,8874	8,3011	+0,5169	+8,6264
847	Virginis	8.9	4	58 42,24		8,8112	,2306	,4912	
848	Ursæ Maj.	8	3	59 33,89	2,519	9,0434	,5094	,4012	-9,0112
849	Virginis	-	4	13 0 20,07	3,146	8,8191	,2512	,4978	+8,1573
850	Comæ Ber.		3	1 27,89	2,950	8,8307	,2707	,4698	-8,3288
051	Can. Ven.	8		3 36,78	2,879	<b>—8 8579</b>		1.0.4500	
851	Virginis	ø	3 5					+0,4592	
852 853	Ursæ Maj.	6.7	3	4 44,07 5 50,04	3,152	8,8169	,2810	,4986 4098	+8,1562  -8,9246
		7		6 21,62	2,569	9,0237	,49 <b>5</b> :3	,4098 4068	+8,0733
854 855	Virginis pre.	8	4		3,139 3,139	8,8126	,2844	<b>,4</b> 968	T 8 (1733
855	seq.	O	4	6 24,38	3,139	8,8126	,2884	,4968	+8,0733

No.	No.	Declination	Annual Preces-		Logarit	hms of		zi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
811 812 813 814 815	2 3 2 3 3	+26 48 32,74 -22 47 16,84 +11 10 47,04 +13 2 4,43 -22 36 13,20	" —19,961 19,952 19,942 19,937 19,920	+9,6314 ,5 ,99 ,1484 ,6444 ,5539	-9,6520 + ,5866 - ,2541 - ,0503 + ,5826	-1,3002 ,3000 ,2997 ,2997 ,2993	+8,9559 8,9803 9,0107 ,0120 ,0437	96 105 113 114 117	s. +,014 +,015 -,007 +,021 +,024	+0,04 -,03 ,00 -,16 -,07
816 817 818 819 820	4 4 4 4	+34 17 23,50 +19 16 50,58 -15 28 52,02 +15 9 21,27 - 7 7 39,86	19,915 19,504 19,892 19,883 19,859	+9,6263 ,6522 ,5×66 ,6551 ,6170	9,7477 ,5154 + ,4236 ,4133 + ,0910	,2489 ,2 87	+9,0527 ,0712 ,0890 ,1011 ,1317	124 132 134 138 147	-,003 +,012 +,019 -,011 +,011	- ,16 - ,13 - ,12 - ,10 - ,16
821 822 823 824 825	4 4 4 3 4	+13 37 3,80 +46 46 42,58 +29 15 42,54 + 3 31 14,43 - 1 56 33,09	19,843 19,×15 19,×14 19,×05 19,796	+9,6580 ,6096 ,6561 ,6454 ,6325	-9,36 <sup>3</sup> 9 -9,4573 -9,6-37 -8,7405 +8,5301	—1,2976 ,2970 ,2969 ,2964 ,2966	+9,1498 ,1781 ,1797 ,1871 ,1943	154 164 165 167 170	+,006 +,011 +,013 +,008	- ,09 + ,08 - ,19 - ,03 - ,03
826	4	+ 0 4 30,95	19,764	+9,6375	6,9347	—1,2959	+9,2214	174	+,024	- ,15
827	4	+ 0 14 3,20	19,762	,6375	7,5715	,2958	,2229	176	+,014	- ,16
828	6	+20 3 35,53	19,675	,6748	9,5267	,2939	,2306	201	+,036	- ,17
829	4	+21 3 52,04	19,674	,6758	9,5469	,2939	,2819	203	+,027	- ,17
830	4	+47 40 7,59	19,658	,6464	9,8602	,2935	,2902	209	+,012	- ,09
831	3	- 6 43 3,66	19,637	+9,6107	+9,0602	—1,2931	+ 9,3015	216	+,016	- ,16
832	4	+ 12 23 15,47	19,615	,6702	,3219	,2926	,3131	221	+,022	+ ,04
833	4	+ 13 35 33,81	19,615	,6721	,3609	,2926	,3131	222	+,026	- ,11
834	4	21 16 53,56	19,594	,5159	+ ,6503	,2921	,3238	225	+,019	- ,03
835	4	32 30 6,00	19,566	,3979	+ ,7201	,2915	,3365	233	+,011	- ,07
836	4	+ 2 24 20,68	19,504	+9,6464	-8,6071	1,2901	+9,3629	246	+,023	- ,06
837	4	-33 24 24,98	19,486	,3674	+9,7288	,2897	,3698	247	+,015	+ ,08
838	3	+24 5 7,63	19,464	,6937	-9,5974	,2892	,3781	252	+,011	- ,02
839	4	+ 6 4 16,78	19,447	,6609	-9,0097	,2889	,3837	256	+,004	- ,01
840	4	+12 6 53,33	19,447	,6758	-9,3083	,2889	,3837	257	+,014	+ ,02
841	4	+ 1 10 57,11	19,435	+9,6429	8,2492	—1,2886	+9,3842	258	+,007	- ,01
842	4	- 7 16 2,87	19,425	,6021	+9,0894	,2884	,3917	259	+,027	- ,13
843	4	+54 50 2,47	19,417	,6561	9,8986	,2882	,3947	261	+,005	- ,23
844	5	+ 4 58 24,36	19,412	,6571	4,9220	,2891	,3961	260	+,025	- ,02
845	4	+ 4 49 35,18	19,402	,6571	8,9100	,2878	,3996	265	+,024	- ,26
846	3	-33 14 14,89	19,402	+9,3522	+9,7249	1,2878	+9,3996	263	+,002	- ,03
847	4	- 5 12 11,55	19,386	,6117	+8,9442	,2875	,4049	271	+,005	- ,13
848	4	+57 54 14,08	19,367	,6522	-9,9129	,2870	,4111	275	+,023	- ,09
849	3	-12 33 45,96	19,348	,5647	+9,3228	,2866	,4167	277	+,002	+ ,14
850	4	+18 21 39,37	19,324	,6955	-9,4822	,2861	,4242	282	+,025	- ,07
851	4	+27 15 41,00	19,272	+9,7093	-9,6437	—1,2849	+9,4390	10	+,016	,05
852	4	-12 35 45,36	19,244	,5599	+ ,3216	,2843	,4465	19	+,001	,06
853	4	+52 46 15,28	19,218	,6893	- ,×826	,2837	,4533	24	+,003	+- ,02
864	5	-10 29 6,51	19,203	,5729	+ ,2520	,2834	,4572	25	,002	,36
865	3	-10 28 42,61	19,203	,5729	+ ,2420	,2834	,4572	26	+,008	,17

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
		·	Us.	Jan. 1, 1836.	sion.	a	b	С	<u>d</u>
856	<b>37:</b> :-:-	0		h. m. s. 13 6 57,78	s.  +3,117	_8,8084	8,2883	+0,4937	+7,9065
857	Virginis	8 8.9	3 3	8 18,28	3,110	8,8066	2956		+7,8319
858		7.8	4	8 19,77	3,154	8,8143	,3032		+8,1433
859	Ursæ Maj.	8.9	3	8 27,41	2,382	9,1072	,5961	,3769	-9,0454
860	Virginis	8	4	9 32,54	2,964	8,8178	,3147	,4719	<b>-8,2198</b>
861	Virginis	8	4	10 3,07	3,107	<b>-8,8051</b>	-8,3056	+0,4923	+7,7801
862		8	4	10 20,92	3,163	,8123	,3145	,4987	8,1230
863		8	3	10 50,26	3,143	,8097	,3155	,4973	8,0621
864		8	j 4	10 54,73			,3182		8,1162
865		7.8	4	12 37,59	3,135	,8072	,3245	,4962	8,0094
866	Hydræ	6	3	12 41,80	3,209	8,8250	8,3427	+0,5064	+8,3298
867	Virginis .	8	3	12 57,63	3,149	,8093	,3284	,4982	+ 8,0860
868	Come Ber.	8	3	13 49,29	2,925	,8249	,3487	,4661	-8,3283
869	Hydræ	8.9	3	13 58,49	3,199	,8206	,3464		+8,2910
870	Virginis	7	4	14 0,62	3,10 <del>8</del> .	,8026	,3284	,4925	+7,7722
871	Ursæ Maj. se	g. 6.7	4	17 19,76	2,417	9,0484	-8,5944		
872	Virginia "	7.8	3	18 22,50	3,108	8,7996			+7,7484
873	Hydræ	8	3	19 18,68	3,248	,8287			
874		7	4	19 27,68	3,275	,8377	3968		+8,4535
875	Virginis	7	2	19 52,03	<b>3,0</b> 08	,7968	,3583	,4869	-5,5606
876	Virginis	8	4	19 52,11	3,140	-8,8021	-8,3636	+0,4969	+7,9925
877	<del></del>	7	2	20 26,57	2,931	8,8148	,3794	,4670	-8,2696
878	Hydræ	7	4	21 9,01	3,233	8,8216	,390 <b>4</b> ,9 <b>0</b> 80	,5096 ,1804	+8,3447 -9,3160
879 880	Ursæ Min. Virginis	7 8	3	21 57,26 22 16,63	1,515 3,141	9,3349 8,8 <b>0</b> 04	,3758	,4971	+7,9883
	Ì	•	1			i .	9 2707	1 0 4005	l
881	Virginis	<b>8</b> 9	3	22 22 44,51	3,080	-8,7953 8,79 0	8,3707 3731	+0,4885 4885	+7,1985 +7,1931
882 883	Ursæ Maj.	8	3	22 48,39	3,080 2,2 <b>2</b> 3	9,1059		,3469	<b>-9,0466</b>
884	Hydræ	8	4	22 49,98	3,291	8,8385	4170	,5173	+8,4690
885	Vriginis V	8.9	4	23 48,21	2,985	8,8004	,3846	,4749	-8,0314
886	Ursæ Min.	7	4	25 38,25	0,444	<b>9,5308</b>	9,1244	+9,6474	<b>-9,52</b> 35
887	Virginis	8	4	26 54,73		8,7928		0,4919	+7,6489
888		8	4	27 17,18		,7968	,4003	4978	+7,9895
889	,	8	3	28 14,84	3,209			,5064	+8,2376
890		9	4	29 6,17	3,119	,7923	,4056	,4940	+7,7994
891	Virginis	9	4	29 30,85	3,074	-8,7898	8,4056	+0,4877	+6,9162
892		8	4	30 2,69	3,093	,7899	,4082	,4904	+7,4940
893		8.9	4	30 10,59	3,049	,7895	,4 89	,4×4·2	<b>7,3500</b>
894 \$95	Bootis	7.8	4	30 44,29	3,010	,7915	,4137 ,4499	,4786 4574	
<b>8</b> 95	D00tia	7.8	4	32 50,92	2,867	,8164	פפר ב,	,4574	<b>-8,</b> 3675
896	Virginis	9	3	34 16,95	3,167	<b>-8,7932</b>	<b>-8,4339</b>	+0,5006	
897	Can Ven.	9	3	34 54,61	2,769	8,8437	,4875	,4443	
898	Virginis	7 7	4	35 0,82	3,101	8,7864	,430 <b>2</b> ,434 <b>5</b>	,4915	+7,5679
899 <b>900</b>	Draconis	7.8	3	35 3,94 36 23,09	2,991 1,862	8,7896 9,1687	,4343 ,8 <b>2</b> 00	,4758 ,2700	7,9394 9,1282
200	TARCOMIS.	1.0		50 20,03	1,002	١٥٥٠رن	,0200	,5700	0,1202

No.	No.	Declination	Annual Preces-		Logarit	hms of		zi No.	Annua	al P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	<i>b'</i>	c'	d'	Piazzi	A.R.	Decn.
856 857 858 859 860	3 3 3 4 4	- 7 11 17,12 - 6 3 58,53 -12 17 24,79 +60 9 43,19 +14 37 44,15	" —19,188 19,154 19,144 19,154 19,123	+9,5955 ,6031 ,5587 ,6730 ,6946	+9,0791 + ,0055 + ,3093 - ,9185 - ,3816	,2823 ,2823	,4692 ,4692	28 34 33 39 43	+,011 +,018 -,035	" 0,06 ,10 ,09 ,11 ,14
861 862 863 864 865	4 4 4 4 4	- 5 24 2,01 -11 46 56,62 -10 17 2,72 -11 37 8,05 - 9 8 17,32	19,109 19,102 19,087 19,084 19,039	+9,6064 ,5599 ,5717 ,5599 ,5786	+ 8,9542 9,2898 9,2311 9,2833 9,1799	-1,2912 ,2811 ,2907 ,2807 ,2807 ,2796	+9,4797 ,4813 ,4845 ,4853 ,4950	46 47 49 50 58	+,012 +,007 +,011 +,006 -,006	,15 ,04 ,10 ,06 + ,06
866	4	-18 37 33,81	19,038	+9,4928	+9,4825	—1,2796	+9,4954	59	,000	+ ,04
867	4	-10 53 4,85	19,031	,6647	+9,2542	,2795	,4965	60	+,012	,11
868	2	+18 37 40,09	19,008	,7093	9,4811	,2789	,5015	63	+,026	+ ,04
869	4	-17 10 7,06	19,002	,5065	+9,4473	,2788	,5026	64	-,004	,11
870	4	- 5 20 10,88	19,002	,6042	+8,9464	,2788	,5026	67	+,005	,32
871	3	+55 46 49,21	18,909	+9,7143	-9,8921	—1,2767	+9,5206	79	+,050	- ,04
872	4	- 5 4 35,93	18,876	,6053	+8,9228	,2759	,5267	81	+,005	- ,12
873	3	-21 32 41,40	18,849	,4456	+9,5387	,2753	,5316	86	+,012	- ,01
874	4	-24 21 35,38	18,844	,4065	+9,5890	,2752	,5323	87	+,018	- ,02
875	3	+ 0 1 47,22	18,833	,6375	-6,4367	,2749	,5344	89	+,018	- ,52
876	4	- 8 53 28,87	18.833	+9,5752	+9,1633	—1,2749	+9,5344	88	+,019	- ,01
877	4	+ 16 33 38,08	18,817	,7109	-9,4268	,2745	,5372	92	+,010	- ,02
878	4	- 19 27 44,01	18,794	,4669	+9,4952	,2740	,5409	97	-,010	- ,05
879	4	+ 73 14 41,12	18,772	,6628	-9,9526	,2735	,5447	109	+,004	- ,02
880	5	- 8 50 31,29	18,760	,5740	+9,1592	,2732	,5467	103	+,007	+ ,06
881 882 883 884 885	3 4 4 4 4	- 1 25 33,10 - 1 24 50,70 +60 46 42,95 -25 16 4,91 + 9 49 19,53	18,760 18,745 18,745 18,743 18,712	+9,6284 ,6284 ,7168 ,3830 ,6893	+8,3745 +8,3691 -9,9117 +9,6014 -9,2001	—1,2732 ,2729 ,2729 ,2728 ,2721	+9,5467 ,5490 ,5490 ,5494 ,5543	104 108 113 107 116	+,013 -,008 +,009 +,009	- ,11 - ,10 + ,03 - ,11 - ,09
886	4	+79 29 28,79	18,660	+9,6415	-9,9615	1,2709	+9,5625	133	-,027	,00
887	3	- 4 5 19,18	18,612	,6095	+9,8239	,2698	,5695	129	+,024	+ ,06
888	6	- 8 56 30,72	18,601	,5694	+9,1603	,2695	,5711	132	+,016	+ ,13
889	4	- 15 36 24,80	18,565	,5011	+9,3973	,2688	,5758	139	+,004	- ,16
890	4	- 5 48 52,72	18,540	,5944	+8,9732	,2681	,5795	144	+,018	- ,13
891	4	- 0 44 11,48	18,526	+9,6325	+8,0923	—1,2678	+9,5816	147	+,012	- ,28
892	5	- 2 52 1,10	18,511	,6180	+8,6695	,2674	,5837	148	+,006	+ ,12
893	3	+ 2 5 33,35	18,504	,6513	-8,5223	,2673	,5847	149	+,006	+ ,02
894	4	+ 6 24 2,60	18,486	,6753	-9,0109	,2668	,5871	153	+,020	+ ,01
895	4	+ 20 50 46,14	18,414	,7372	-9,5142	,2651	,5966	161	+,020	+ ,05
896	4	-10 28 19,01	18,365	+9,5490	+9,2219	1,2640	+9,6027	166	+,001	- ,13
897	2	+29 1 59,20	18,341	,7597	-9,6473	,2635	,6053	172	+,010	- ,12
898	4	- 3 26 37,87	18,339	,6117	+8,7429	,2636	,6059	171	+,003	- ,02
899	4	+ 8 7 45,59	18,337	,6875	-9,1111	,2633	,6062	173	+,026	- ,00
900	4	+65 39 7,64	18,292	,7419	-9,9198	,2622	,6116	184	,000	- ,26

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
				Jan. 1, 1836.	sion.	a	ь	c	<u>d</u>
901 902 903 904	Virginis	9 7 7 8	4 4 4 3	h. m. s. 13 36 42,27 36 53,89 38 51,92 38 52,29	3. +3,092 3,180 3,126 3,0×4	-8,7843 ,7926 ,7843 ,7822	-8,4373 ,4469 ,4483 ,4462	+0,4902 ,5024 ,4950 ,4891	+8,0954
905 906 907	Solitarii  k³ Centauri	7.8 7 7.8	4 4 4	41 57,28 42 23,90	3,280 3,432	,8068  8,8514		,5159 + 0,5355	+8,3446
907 908 909 910	Bootis Virginis Bootis	7.8 7 8	3 4 4	42 36,2× 42 39,26 43 50,69 43 58,98	2,833 2,833 2,936 2,913		,4944	,4522	
911 912 913 914 915	Bootis Virginis Camelop.	7.8 8.9 8 8 7	2 2 5 3 4	45 15,18 46 13,49 46 40,25 46 59,56 47 23,09	2,925 2,980 2,978 3,025 — 2,258	8,7799 8,7796 8,7756	8,4791	,4742	
916 917 918 919 920	Virginis Bootis	8 8 7 7 7.8	4 2 3 3 4	47 57,91 49 6,73' 49 40,05 49 59,20 50 55,84	3,190 2,879	,7740 ,7805 ,7911	,4871	,5038	+7,6875
921 922 923 924 925	Bootis Virginis Draconis Virginis	9 9 8 8 9	4 1 3 3 4	51 7,30 52 13,42 53 34,68 54 35,53 56 31,48	3,149 3,194 1,683	8,7730 8,7765 9,1439	,5005 ,5102 ,8817	,4982 ,5043 ,2261	-8,2375 +7,8770 +8,0666 -9,1017 +7,9272
926 927 928 929 930	Hydræ Virginis Solitarii Hydræ Virginis	8 7.8 10 9 8	3 3 3	57 0,53 58 18,78 58 57,29 59 13,35 59 36,69	3,250 3,296 3,391	,7790 ,7865 ,8079	,5442 ,5667	,5119 ,5180 ,5303	+8,4488 +8,2036 +8,2977 +8,4477 +8,0810
931 932 933 934 935	Virginis	7.8 8 8.9 8.9	4 3 2 1 1	14 1 11,06 1 25,43 2 35,11 2 43,23 4 2,69	2,937 3,185 3,006	,7677 ,7647 ,7599	-8,5281 ,5362 ,5380 ,5341 ,5367		-8,0490 +7,9920 -7,7144
936 937 938 939 940	Bootis Virginis	7.8 8 8.9 9 7.8	3 2 3 4 3	4 40,28 6 2,07 7 35,09 9 38,56 10 14,63	2,962 2,146 2,914	,7594 ,9686 ,7509	-8,5436 ,5476 ,7630 ,5633 ,5566	,4716 ,3316 ,4645	-7,9441 -7,9358 -8,8683 -8,0807 -7,6373
941 942 943 944 945	Solitarii Virginis Hydræ ——— Virginis	7.8 8 9 8 7.8	4 3 2 4 3	10 22,77 11 27,82 13 58,38 14 30,35 16 7,87	2,984 3,445 3,446	,7509 ,7952 ,7942	,5618 ,6166 ,6180	,4748 ,5372 ,5373	

No.	No.	Declination	Annual Preces-		Logarit	hms of		zi No.	Annual	Р. М.
	Obs.	Jan. 1, 1836. 	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
901 902 903 904 905	4 4 4 4	- 2 29 16,29 -11 33 32,96 - 5 52 56,36 - 1 37 12,79 -20 10 7,06	-18,279   18,277   18,200   18,200   18,086	+9,6180 ,5340 ,5899 ,6253 ,4133	9,2625 8,9700	,2619 ,2601 ,2601	,6141 ,6221 ,6221	182 183 192 193 212	+,013 +,007	+0,06 +,02 -,06 +,01 -,14
906 907 908 909 910	5 3 5 4 4	-32 10 39,21 +22 4 19,57 +29 5 35,74 +12 45 0,45 +14 50 28,30	18,067 18,061 18,058 18,054 18,008	+9,1367 ,7520 ,7520 ,7520 ,7168 ,7259	+9,6816 -9,5293 -9,5295 -9,2962 -9,5612	,2567	,6371 ,6374	217 219 220 223 224	-,609 +,011 +,004 +,003 +,014	- ,02 + ,07 + ,08 - ,05 - ,26
911	3	+ 13 33 17,40	17,941	+9,7210	—9,3215	-1,2543	+9,6475	232	-,017	- ,03
912	5	+ 8 21 13,48	17,922	,6937	9,1126	,2534	,6510	236	+,009	- ,07
913	4	+ 8 29 4,85	17,904	,6946	9,1181	,2529	,6528	239	+,005	- ,01
914	5	+ 4 4 54,65	17,890	,6665	8,7996	,2526	,6541	241	+,008	- ,08
915	2	+ 83 34 27,99	17,895	,6955	9,9480	,2527	,6535	263	-,069	- ,08
916	3	- 9 13 34,56	17,853	+9,5502	+9,1559	—1,2517	+9,6575	245	-,014	- ,04
917	4	- 4 40 42,02	17,×08	,5966	+8,8621	,2506	,6617	252	+,010	- ,07
918	4	-11 14 58,99	17,787	,5263	+9,2390	,2501	,6638	256	+,030	- ,19
919	4	+17 0 29,83	17,772	,7404	-9,4133	,2498	,6649	259	+,010	+ ,08
920	3	+15 21 43,44	17,735	,7332	-9,3692	,2488	,6633	265	+,013	- ,09
921	2	+16 21 4,23	17,727	+9,7380	9,3957	-1,2486	+9,6690	268	+,017	+ ,07
922	4	- 7 16 23,52	17,681	,5694	+9,0495	,2475	,6730	271	+,020	,06
923	4	-11 14 29,00	17,025	,5224	+9,2343	,2461	,6779	278	+,039	,05
924	3	+65 10 56,45	17,587	,7910	9,9011	,2452	,6810	285	+,019	+ ,14
925	4	- 8 15 28,67	17,502	,5563	+9,0987	,2431	,6880	<b>291</b>	+,011	,00
926	4	-25 47 25,64	17,479	+9,2504	+9,5793	—1,2425	+9,6896	294	+,015	- ,10
927	4	-15 24 20,43	17,424	,4579	9,3638	, <del>2</del> 412	,6939	300	+,001	- ,18
928	4	-18 56 14,16	17,396	,3997	9,4496	,2404	,6961	304	+,029	- ,06
929	3	-25 52 7,51	17,384	,2405	9,5779	,2401	,6970	305	+,001	- ,12
930	3	-11 46 56,40	17,367	,5092	9,2478	,2397	,6983	307	+,044	- ,09
931	4	+ 3 34 40,40	17,299	+9,6665	8,7299	—1,2380	+9,7033	3I3	+,009	- ,03
932	3	+11 1 50,70	17,287	,7185	9,2170	,2377	,7042	314	+,012	- ,21
933	2	- 9 42 7,28	17,237	,5340	+9,1618	,2365	,7078	6	+,007	- ,06
934	2	+ 5 10 49,55	17,228	,6794	8,8888	,2362	,7084	7	+,005	- ,10
935	1	- 2 11 46,70	17,171	,6170	+8,5203	,2348	,7125	13	+,017	- ,12
936	2	+ 8 46 58,14	17,141	+ 9,7059	-9,1151	-1,2340	+9,7146	18	+,027	— ,07
937	4	+ 8 39 4,17	17,080	,7059	9,1069	,2325	,7187	21		— ,10
938	2	+52 33 29,06	17,013	,8344	9,8285	,2308	,7232	30		— ,03
939	4	+12 5 54,54	16,914	,7292	9,2471	,2282	,7296	35		— ,02
940	4	+ 4 26 11,02	16,885	,6758	8,8121	,2275	,7314	39		— ,14
941 942 943 944 945	3 4 3 3 4	-17 45 45.17 + 6 39 21,76 -27 3 32,73 -26 59 46,02 - 1 35 43,85	16,876 15,829 16,706 16,678 16,604	+9,3944 ,6937 ,1303 ,1335 ,6212	+9,4102 -8,9867 +9,5790 +9,5772 +8,3686	-1,2273 ,9260 ,2229 ,2221 ,2201	+9,7320 ,7349 ,7423 ,7440 ,7485		+,006 +,002 -,014	+ ,01 ,00 - ,25 - ,08 - ,06

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-	Logarithms of			
				Jan 1, 1836.	sion.	а	ь	C	d
946 947	Bootis Hydræ	8	4 2	h. m. s. 14 16 27,70 17 11,47	+2,026	-8,9753	-8,8067	+0,3066	
948	Virginis	10	2	18 12,77	3,438 3,027	,787 <b>4</b> ,739 <b>4</b>	,6221 ,5781	,5363 ,4874	+8,4311 +6,5253
949	<del></del>	7	4	20 18,77	2,982	,7394	,5865		-7,7877
950	Bootis	7.8	4	<b>2</b> 2 5,33	2,944	,7397	,5940	,4689	-7,9411
951	Virginis	8	3	22 12,10	3,101	-8,7344	<b>8,5893</b>	+0,4915	+7,3534
952	Centauri	8	3	24 28.92	3,878	,8872	,7511	,5886	+8,7423
953 954	Virginis	8 8	2 4	24 42,09	3,153	,7332	,5979	,4987	+7,7678
955		8	2	25 2,10 27 <b>22,</b> 39	3,153 3,010	,7327 ,7281	,5987 ,6033		+7,7626  7,5893
956	Virginis	7						i	i
957	V Tiginia	9	3 2	27 32,81 27 38,78	3.194 3,111		-8,6080 ,6035	+0,5043   4929	+7,9222 $+7,4579$
958	Solitarii	8	l ĩ	28 39,02	3,403	,7593	,6399	,5319	+8,3419
959	Virginis .	8	3	30 23,43	3,140	,7242	,6115		+7,6717
960		9.10	2	30 24,97	3,225	,7304	,6177	,5085	+8,0071
961	Virginis	8	4	32 21,27	3,151	-8,7218	<b>8,6167</b>	+0,4984	+7,7239
962	Libræ	7	2	33 12,67	3,237	,7273	,6253	,5101	+8,0272
963		8 8	2	33 28,51	3,236	,7267	,6260	,5100	+8,0251
96 <b>4</b> 9 <b>65</b>	Virginis	8	3 4	33 42,81 35 45,13	3,445 3,149	,7582 ,7167	,6586 ,6248	,5372 ,4982	+ 8,3747 + 7,71 <i>5</i> 0
966	Bootis	7	3	38 22,68	2,827	-8,7272		  +0,4513	-8,1627
967	Libræ	8	3	39 52,36	3,258	,7184	-8,6454 ,64 <b>2</b> 4	,5129	+8,0520
968	Lupi	8	2	42 51,11	3,634	,7795	7150		+8,5152
969	Libræ	8 8	4	43 33,27	3,315		,6568	,5205	+8,1519
970		O	3	45 22,67	3,065	,6990	,6443	,48 <b>64</b>	<b>6,3</b> 089
971	Solitarii	9 8	. 3	45 53,19		-8,7408	-8,6 <sup>8</sup> 79	+0,5416	
97 <b>2</b> 973	Libræ Virginis	<b>7</b>	2	48 55,85		,7117	,6705	,5235	+8,1702
974	Bootis	8	4 4	50 20,65 50 32,97	3,137 2,906	,6918 ,6971	,6659 ,6619	,4965 ,4633	+7,5701 7,9432
975	Libræ	7	4	53 54,36	3,349		,6813		+8,1691
976	Libræ	8	4	54 24,86	3,331	-8,7004	—8,6°00	+ 0,5226	+8,1394
977.		8	2	54 53,65		,6857	,6670	,5024	+7,7675
978		8.9	2	55 39,94	3,306	,6949	,6792	,5193	+8,0901
979	Serpentis Bootis	8 8	3	55 58,95	3,072		, , .	,4874	+6,3483
980	Bootis	0	4	56 42,51	2,600	,7281	,7162	,4150	- 8,3801
981	Serpentis	7	3	58 13,25	3,068	-8,6773	-8,6712	+0,4868	<b>-7,4792</b>
982	Libræ	7.8	4	58 29,11	3,205	8,6806	8,6753	0,5058	+7,8400
983 984	Ursæ Min.	8 8	3	59 11,45 59 14,39		8,6832 9,1673	8,6809	0,5129	+7,9797
985	Serpentis	8.9	4	59 37,44	<b>0,29</b> 5 <b>3,059</b>	8,6738	9,1645 8,6730	9,4698 0,4856	-9,1436 -6,6690
986	Libræ	9	4	15 1 38,01	3,442	8,7010		Ť	·
987		7.8	4	2 14,01	3,442	,6790	-8,7081 ,6883	+0,5367	+8,2645 +8,0126
988	Serpentis	7	4	3 15,50		,675.	,6806	,4787	-7,4448
989	Scorpii	7.8	2	3 54,64	3,510	,7071	,7227	,5453	+8,3281
990	Draconis	8	3	4 5,05	1,512	,9443	,9602	,1795	-8,8740

No.	No.	Declination	Annual Preces-		Logarit	hms of		zzi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	<b>b</b> '	c'	d'	Piazzi	A. R.	Decn.
946 947 948 949 950	4 4 4 4 4 4	+54 16 11,78 -26 6 13,34 - 0 20 35,75 + 6 25 12,65 + 9 5 16,02	-16,587 16,544 16,498 16,395 16,304	+9,8513 ,1492 ,6345 ,6964 ,7168	-9,8272 +9,5604 +7,7014 -8,9610 -9,1086	-1,2198 ,2168 ,2174 ,2147 ,2123	+9,7492 ,7515 ,7542 ,7598 ,7647	79 78 81 93 99	*. +,018 +,009 +,033 +,006 +,016	-0,10 + ,90 - ,16 + ,09 - ,04
951 952 953 954 955	4 4 4 4	- 2 22 27,68 -45 44 10,94 - 6 12 32,27 - 6 8 39,31 + 4 11 19,50	16,297 16,181 16,171 16,153 16,032	+9,6117 ,0792 + ,5670 + ,5659 ,6776	+8,5291 +9,7621 +8,9413 +8,9362 —8,7644	—1,2121 ,2090 ,2087 ,2083 ,2050	+9,7650 ,7709 ,7709 ,7723 ,7783	100 106 103 111 120	+,012 +,006 +,012 +,010 +,020	+ ,08 + ,02 ,12 ,13 ,13
956	4	- 8 53 26,38	16,021	+9,5276	+9,0930	-1,2047	+9,7788	121	+,004	- ,04
957	4	- 3 3 35,46	16,017	,6031	+8,6333	,2046	,7790	122	+,006	+ ,07
958	4	-22 26 50,27	15,962	,2279	+9,4836	,2031	,7816	129	-,050	+ ,02
959	5	- 5 4 25,72	15,869	,5775	+8,8460	,2006	,7859	139	+,014	- ,16
960	4	-10 52 50,33	15,869	,4928	+9,1753	,2006	,7859	138	+,029	- ,08
961	4	- 5 45 2,02	15,766	+9,5682	+8,8978	—1,1977	+9,7906	144	+,009	,08
962	4	-11 31 43,93	15,722	,4786	+9,1954	,1965	,7925	146	+,029	,03
963	4	-11 26 53,08	15,704	,4800	+9,1925	,1960	,7933	151	-,005	,04
964	3	-24 24 18,40	15,690	,1399	+9,5100	,1956	,7940	153	+,003	,07
965	4	- 5 41 21,51	15,580	,5670	+8,8889	,1926	,7987	162	+,020	,02
966	4	+15 49 29,94	15,437	+9,7716	9,3220	1,1885	+ 9,8047	178	+,018	- ,03
967	3	-12 25 47,93	15,350	9,4564	+9,2178	,1861	,8082	181	+,002	- ,02
968	4	-32 56 50,24	15,180	7,9031	+9,6150	,1813	,8149	192	,000	- ,02
969	3	-15 43 10,02	15,142	9,3801	+9,3114	,1802	,8164	195	+,005	- ,09
970	3	+ 0 14 54,15	15,034	9,6395	7,4850	,1771	,8204	205	+,001	- ,18
971	4	-24 56 38,94	15,007	+9,0569	+9,4995	1,1763	+9,8214	208	+,019	,17
972	4	-16 42 1,05	14,828	,3483	+9,3276	,1711	,8279	223	-,004	,07
973	4	- 4 19 24,08	14,746	,5809	+8,7450	,1687	,8308	229	-,003	,16
974	5	+10 9 32,83	14,737	,7380	-9,1124	,1683	,8312	230	+,003	,18
976	4	-16 58 50,76	14,531	,3304	+9,3258	,1623	,8381	246	+,013	,09
976 977 978 979 980	4 4 4 4	-15 56 32,60 - 6 55 22,24 -14 21 4,80 - 0 15 41,64 +26 41 8,13	14,503 14,474 14,426 14,406 14,365	+9,3 <b>7</b> 47 ,5403 ,3944 ,6345 ,8457	+9,2985 +8,9404 +9,2522 +7,5244 -9,5074	—1,1614 ,1606 ,1591 ,1585 ,1573	+9,8390 ,8399 ,8415 ,8422 ,8435	252 254 256 257 264	+,016 +,019 +,007 ,000 +,006	,03 ,02 ,07 ,27 + ,02
981	4	+ 3 38 50,26	14,272	+9,6785	-8,6544	—1,1545	+9,8464	271	+,016	,10
982	4	- 8 17 23,00	14,259	,5172	+9, <del>01</del> 15	,1541	,8468	272	+,004	+ ,01
983	3	-11 24 46,25	14,210	,4563	+9,1471	,1526	,8483	276	-,001	,05
984	3	+71 15 30,31	14,217	,9063	-9,8271	,1528	,8481	285	,000	+ ,17
985	4	+ 0 34 41,14	14,185	,6444	-7,8451	,1518	,8491	278	+,007	,07
986	4	-21 26 52,09	14,057	+9,1553	+9,4093	-1,1479	+9,8530	289	,000	- ,05
987	3	-12 25 37,35	14,019	9,4314	+9,1784	,1467	,8541	1	+,013	+ ,01
988	4	+ 3 27 14,30	14,021	9,6785	-8,6201	,1448	,8559	4	+,009	- ,01
989	4	-24 41 9,25	13,912	8,9685	+9,4625	,1435	,8572	5	-,019	- ,19
990	4	+58 17 10,92	13,910	9,9248	-9,7710	,1433	,8573	12	+,009	- ,01

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
			O Da.	Jan. 1, 1836.	sion.	a	ь	c	d
991 992 993 994 995	Scorpii 2 Libræ Serpentis Lupi	8 9.10 8 8 var.	3 4 4 4 4	h. m. s. 15 4 17,96 5 14,86 5 56,57 9 15,08 10 27,46	3,114 3,074	8,7032 ,6843 ,6620 ,6547 ,7977	8,7203 ,7048 ,6852 ,6906 ,8384	+0,5431 ,5289 ,4933 ,4877 ,6057	+8,3088 +8,1704 +7,3456 +6,4986 +8,6422
996 997 998 999 1000	Libræ Cor. Bor. Libræ	8.9 8 8 8.9	4 4 4 2 3	11 36,19 11 49,04 12 26,93 12 47,20 12 51,81	3,173 2,489	-8,6571 ,6641 ,6506 ,7106 ,6499	8,7019 ,7096 ,6984 ,7597 ,6993	,5224 ,5015	+7,9157 +8,0714 +7,6722 -8,4115 +7,6856
1001 1002 1003 1004 1005	Cor. Bor. Libræ Serpentis Libræ	8.9 8 . 8 9.10	2 3 4 3	13 32,82 13 42,86 15 57,03 16 3,34 16 11,26	3,246 3,068 2,899	,6406 ,6464		,4869	8,4128 +7,8947 5,4053 7,8632 +7,8298
1006 1007 1008 1009 1010	Serpentis Draconis Libræ Bootis Libræ	8 8 8 8.9	3 2 4 2 3	16 21,65 16 31,98 16 37,22 18 18,89 18 <b>2</b> 8,34	1,651 3,453 2,475	,8756 ,66×3 ,7384	8,7088 ,9387 ,7324 ,8087 ,7079	,5382	-7,8710 -8,7863 +8,2190 -8,5269 +7,5982
1011 1012 1013 1014 1015	Libræ Cor. Bor. Serpentis	7.8 8 <i>var</i> . 6.7 8.9	4 3 4 2 2	18 49,41 19 16,13 19 42,40 19 52,30 21 19,36	3,264 3,165 2,352	,6410 ,6342	8,7354 ,7152 ,7099 ,7943 ,7108	+0,5381 ,5137 ,5004 ,3714 ,4810	+8,2104 +7,9171 +7,6119 -8,4756 -7,2356
1016 1017 1018 1019 1020	Libræ Scorpii Libræ	8.9 8 8 8	5 1 3 4 3	21 41,65 21 53,25 22 12,79 23 10,90 24 15,14	3,350 3,609 3,422	,6789 ,6481	,7646 ,7374	,5250 ,5574 ,5343	+8,1466 +8,0643 +8,3450 +8,1574 +7,8485
1021 1022 1023 1024 1025	Serpentis Libræ Lupi Serpentis Libræ	7.8 8.9 7.8 7.8	3 3 4 3	25 5,31 29 5,16 29 30 3,07 30 41,70	3,323 4,094 2,742	,6 <b>2</b> 24	8,7173 ,7346 ,8669 ,7432 ,7369	,5215 ,6121	7,4497 +7,9927 +8,5948 8,0950 +7,9877
1026 1027 1028 1029 1030	Libræ Scorpii Serpentis Draconis 29 Serpentis	8 7.8 8 8 7.8	3 3 5 4 4	32 9,02 33 23,67 35 31,09 36 49,92 38 51,45	3,566 3,013 0,597	,5944	-8,7388 8,7709 8,7321 9,1292 8,7532	+0,5215 0,5522 0,4790 9,7760 0,4399	+7,9812 +8,2660 -7,3059 -8,9488 -8,0436
1031 1032 1033 1034 1035	31v Serpentis  g * Lupi Serpentis  Lupi	7 6.7 var. 8 8	2 5 3	39 40,54 46 46 54,69 49 50,06 53 31,63	2,782 3,807 2,890 2,710 3,865		-8,7513 ,8247 ,7518 ,7707 ,8411	+0,4444 ,5806 ,4609 ,4330 ,5871	7,9998 +8,3842 7,7657 8,0555 +8,3878

No.	No.	Declination	Annual Preces-		Logaritl	nms of		zi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	. <b>b</b> ′	c'	d'	Piazzi	A.R.	Decn.
991 992 993 994 995	4   1   4   4   4   4	-23 45 24,70 -17 49 10,56 - 2 44 49,85 - 0 22 45,78 -44 20 14,88	13,890 13,834 13,788 13,575 13,493	+9,0253 +9,2810 +9,6010 +9,6325 -9,3139	+9,4463 +9,3251 +8,5212 +7,6747 +9,7727	-1,1427 ,1410 ,1395 ,1327 ,1301	+9,8579 ,8595 ,8608 ,8667 ,8689	8 15 17 28 30	s. +,007 +,005 +,009 +,010 -,012	+0,01 ,10 ,04 ,13 ,06
996 997 998 999 1000	4 4 5 4 4	-10 26 3,79 -14 46 32,71 - 6 0 59,15 +30 9 55,75 - 6 13 46,43	13,424 13,422 13,373 13,350 13,347	+9,4654 9,3617 9,5478 9,8751 9,5453	+9,0845 +9,2328 +8,8459 -9,5245 +8,8591	-1,1279 ,1275 ,1262 ,1255 ,1254	+9,8707 ,8711 ,8721 ,8727 ,8728	38 40 43 46 45	+,016 +,001 +,009 -,006 +,017	,17 ,17 ,05 ,15 ,06
1001 1002 1003 1004 1005	4 3 3 4 4	+30 20 18,76 -10 3 36,68 + 0 2 26,75 + 9 29 29,16 - 8 47 26,90	13,303 13,290 13,141 13,136 13,123	+9,8768 9,4713 9,6375 9,7419 9,495ô	9,5251 +9,0641 6,5814 9,0333 +9,0007	-1,1239 ,1235 ,1186 ,1185 ,1180	+9,8739 ,8742 ,8780 ,8781 ,8784	51 48 60 62 61	+,003 +,002 +,020 +,006 +,011	- ,13 - ,32 - ,20 - ,11 - ,08
1006 1007 1008 1009 1010	4 3 3 2 3	+ 9 40 28,71 +54 31 2,10 -20 47 52,83 +37 55 32,23 - 5 14 22,18	13,114 13,110 13,092 12,986 12,973	+9,7443 9,9385 9,1367 9,9085 9,5575	9,0409 9,7263 +9,3657 9,6000 +8,7725	1,1177 ,1176 ,1170 ,1135 ,1130	+9,8786 ,8788 ,8792 ,8818 ,8821	66 68 65 74 70	+,011 +,028 +,012 -,008 +,005	,16 ,11 ,04 + ,01 ,18
1011 1012 1013 1014 1015	4 4 4 4	-20 37 59,37 -10 52 24,13 - 5 25 44,66 +34 54 34,75 + 2 19 39,54	12,950 12,919 12,922 12,885 12,785	+9,1367 9,4487 9,5563 9,8998 9,6674	+9,3577 +9,0853 +8,7860 -9,5656 -8,4113	-1,1123 ,1112 ,1103 ,1100 ,1067	+9,8826 ,8834 ,8840 ,8842 ,8866	71 77 79 81 85	-,027 +,009 +,008 +,014 +,033	- ,01 - ,08 - ,11 - ,14 - ,10
1016 1017 1018 1019 1020	4 4 4 4	-18 16 2,13 -15 16 45,43 -27 46 1,52 -18 50 20,13 - 9 33 1,32	12,754 12,744 12,717 12,654 12,587	+9,2304 9,3324 8,4314 9,2041 9,4742	+9,3002 +9,2247 +9,4685 +9,3096 +9,0185	1,1056 ,1053 ,1044 ,1029 ,0999	+9,8873 ,8875 ,8881 ,8896 ,8911	87 88 90 94 101	-,017 +,007 +,017 +,017 +,015	+ ,01 ,13 ,06 ,01 ,14
1021 1022 1023 1024 1025	4 1 5 5	+ 3 52 56,77 -13 33 17,40 -44 4 +17 4 33,86 -13 30 49,22	12,527 12,253 12,211 12,188 12,141	+9,6866 +9,3729 -9,3802 +9,8116 +9,3711	-8,6248 +9,1565 +9,6272 -9,2515 +9,1515	—1,0979 ,0882 ,0867 ,0859 ,0843	+9,8924 ,8984 ,8993 ,8997 ,9007	107 127 129 137 139	+,013 +,010 +,005 ,000	-,10 +,05 ,00 +,02
1026 1027 1028 1029 1030	4 3 4 4 4	-13 26 4,22 -24 53 10,35 + 2 57 54,27 +66 19 33,38 +16 2 32,63	12,039 11,950 11,800 11,719 11,568	+9,3729 8,7404 9,6767 9,9624 9,8082	+9,1452 +9,3997 -8,4814 -9,7287 -9,2025	-1,0806 ,0774 ,0719 ,0689 ,0632	+9,9028 ,9046 ,9076 ,9091 ,9120	144 149 159 168 171	+,015 +,009 +,005 +,022 +,011	+ ,02 ,11 ,12 + ,03 ,05
1031 1032 1033 1034 1035	3 3 4 4 4	+14 37 30,26 -33 28 34,12 + 9 4 18,86 +17 39 43,95 -34 59 14,18	11,511 11,009 10,985 10,769 10,487	+9,7973 8,9956 +9,7490 +9,8254 9,1271	9,1616 +9,4815 8,9363 9,2107 +9,4773	1,0611 ,0417 ,0408 ,0322 ,0207	+ 9,9131 ,9220 ,9224 ,9260 ,6305	173 205 209 223 236	+,005 +,023 +,001 ,000	- ,11 + ,01 + ,02 - ,22

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
				Jan. 1, 1836.	sion.	a	b	с	d
1036 1037 1038	Libræ Scorpii	8 8 8.9	4 3 3	h. m. s. 15 53 51,21 54 26,06 55 20,47	+3,229 3,229 3,494	8,5463 ,5444 ,5655	8,7590 ,7596 ,7847	+0,5091 ,5091	+7,6925 +7,6898 +8,1088
1039 1040	Draconis	8 8	4 4	55 36,74 56 25,10	3,442 1,433	,5584 ,7755	,7788 ,9987		+8,0507 -8,6888
1041 1042 1043	Scorpii 1 Lupi Herculis	8 7.8 8	4 5 1	56 55,02 57 36,67 58 18,72	3,660 3,989 <b>2,</b> 949	,6373	8,8095 ,8665 ,7620	+0,5635 ,6009 ,4697	+8,4330
1044 1045	Scorpii	8 8.9	3	59 33,67 59 50,14	3,457		,7844 ,7859	,5387 ,5401	+ 8,0497 + 8,0604
1046 1047 1048 1049 1050	Serpentis  Serpentis  Scorpii  Serpentis	8 8 9 8 8.9	4 3 4 3 4	16 0 36,07 0 40,96 2 44,52 3 12,55 3 49,22	2,702	,5658 ,5358		,4317 ,5660 ,5406	-8,0185 +8,2334 +8,0503
1051 1052 1053 1054 1055	Ophiuchi Herculis	8 8 7 8 7	2 4 4 4 1	5 10,62 5 16,21 6 10,21 9 10,29 9 28,50	3,541 2,935 2,938 3,766	8,5374 ,5072 ,5040 ,5552	,7708 ,8360	+0,5491 ,4676 ,4680 ,5759	+8,1103 7,5577 7,5455 +8,2609
1056 1057 1058 1059 1060	Scorpii seq. —— præc ——— seq.	8 8 8 8.9 8.9	4 2 1 1 3	9 41,16 10 30,74 10 55,11 10 55,69 11 19,82	3,492 3,494 3,494	,5117 ,5104 ,5104	,7987 ,7992	,5431 ,5433	+8,0385 +8,0385 +8,0385
1061 1062 1063 1064 1065	Regulæ Serpentis	7.8 8.9 7 8	3 4 4 4 4 4	11 22,08 12 44,97 12 56,22 14 1,83 14 7,32	2,807 4,029 3,000	,4876 ,5848 ,4734	,7848 ,8833 ,7766	,4482 ,6052 ,4771	-7.8172
1066 1067 1068 1069 1070	Scorpii	8 8.9 8 9 8	3 3 4 4	14 19,12 15 24,28 15 35,04 15 48,41 16		,5253 ,5028 ,5128	8,7889 ,8355 ,8136 ,8246 ,7846		+8,2111 +8,0961
1071 1072 1073 1074 1075	Regulæ Ophiuchi	7.8 8.9 8.9 9 8.9	4 4 4 4 4	19 13,15 20 2,53 23 4,91 24 35,42 27 49,34		.5237	-8,7815 ,8234 ,8718 ,7857 ,8210	+0,4771 ,5595 ,5942 ,4794 ,4098	-7,2037 +8,1135 +8,2845 -7,0581 -8,0236
1076 1077 1078 1079 1080	Herculis Ophiuchi	8 8 8.9 8 8.9	1 4 3 3 4	28 3,26 28 48,71 30 45,54 31 10,01 31 44,24	3,197 2,673 3,224 2,427 2,774	,4324 ,4059	8,7905 ,8100 ,7937 ,8421 ,8029		+7,4338 7,9177 +7,5039 8,1146 7,7734

No.	No.	Declination	Annual Preces-		Logarith	ms of		zi No.	Annua	d P. M.
	Obs		sion.	a'	b'	c'	d'	Piazzi	A.R.	Decn.
1036 1037 1038 1039 1040	2	- 8 1 49,29 - 8 1 2,00 -20 26 36,12 -18 4 53,22 +54 58 55,53	-10,472 10,427 10,357 10,337 10,288	+9,4928 +9,4928 +9,0334 +9,1673 +9,9782		,0182	,9315 ,9325 ,9328	240 243 244 249 262		-,01 ,00 -,21 +,01 -,12
1041 1042 1043 1044 1045	1 2 3 4 3	-27 16 4,24 -38 39 23,51 + 5 51 37,02 -18 33 6,01 -19 0 51,87	10,237 10,182 10,137 10,036 10,017	-7,9031 -9,2988 +9,7152 +9,1303 +9,1072	+9,3695 +9,5016 -8,7122 +9,2026 +9,2121	-1,0102 ,0079 ,0059 ,0016 ,0007	+9,9343 ,9352 ,9358 ,9373 ,9376	257 260 269 273 275	+,004 +,011 +,008 +,009 +,015	- ,02 + ,09 - ,07 + ,02 + ,16
1046 1047 1048 1049 1050	4 3 4 3 5	+ 5 50 46,53 +17 29 53,33 -27 42 9,40 -19 4 18,61 +18 21 28,23	9,966 9,961 9,794 9,758 9,717	+9,7160 +9,8280 -8,3424 +9,0934 +9,8370	8,7036 9,1741 +9,3565 +9,2018 9,1836	—0,9985 ,9983 ,9909 ,9893 ,9875	+9,9383 ,9384 ,9408 ,9412 ,9418	281 285 5 7 11	+,017 +,001 +,005 +,004 -,003	-,06 -,03 +,03 -,01 +,05
1051 1052 1053 1054 1055	4 5 4 3 4	-21 57 27,85 + 6 27 46,91 + 6 19 29,10 -30 29 47,94 -39 1 24,20	9,610 9,605 9,538 9,301 9,276	+8,8692 +9,7243 +9,7235 -8,8808 -9,3463	+9,2537 -8,7310 -8,7190 +9,3623 +9,4645	0,9827 ,9825 ,9795 ,9685 ,9678	+9,9433 ,9433 ,9442 ,9473 ,9477	17 20 24 35 37	+,001 +,013 +,018 ,000 +,005	- ,12 + ,01 + ,03 - ,04 - ,07
1056 1057 1058 1059 1060	4 4 4 3 5	+19 15 20,32 -19 39 10,32 -19 42 55,50 -19 42 43,27 +17 1 16,14	9,265 9,198 9,167 9,167 9,141	+9,8463 +9,0414 +9,0334 +9,0334 +9,8299	-9,1830 +9,1888 +9,1883 +9,1883 -9,1254	-0,9669 ,9637 ,9622 ,9622 ,9610	+9,9478 ,9486 ,9490 ,9490 ,9494	43 45 48 49 53	+,017 ,000 ,000 -,003 -,007	- ,07 - ,10 - ,08 - ,11 + ,06
1061 1062 1063 1064 1065	4 4 5 4 4	+ 5 56 31,76 +12 20 18,86 -38 48 3,00 + 3 16 7,13 + 3 28 38,75	9,136 9,026 9,006 8,927 8,917	+9,7193 +9,7882 -9,3483 +9,6848 +9,6876	8,6732 8,9831 +9,4497 8,4045 8,4298	-0,9607 ,9555 ,9545 ,9507 ,9502	+9,9494 ,9510 ,9510 ,9520 ,9521	52 57 55 62 63	+,012 +,008 +,017 +,003 +,017	- ,05 - ,07 - ,06 - ,05 - ,15
1066 1067 1068 1069 1070	4 4 2 4	+13 51 5,82 -29 0 52,38 -23 4 25,95 -26 11 2,40 - 9 41	8,907 8,813 8,802 8,786 8,718	+9,8028 -8,7482 +8,6628 -7,9031 +9,4409	-9,0263 +9,3289 +9,2360 +9,2868 +8,8658	-0,9597 ,9451 ,9446 ,9438 ,9404	+9,9522 ,9533 ,9535 ,9537 ,9544	67 68 70 76	+,008 +,001 +,004 +,013	- ,09 + ,04 - ,02 - ,04
1071 1072 1073 1074 1075	4 4 4 4 4	+ 3 14 42,67 -24 46 45,40 -35 11 15,49 + 2 26 35,23 +22 5 10,37	8,508 8,449 8,206 8,048 7,831		-8,3791 +9,2475 +9,3730 -8,2338 -9,1667	-0,9298 ,9268 ,9141 ,9079 ,9938	+9,9569 ,9575 ,9602 ,9614 ,9640	87 94 109	+,008 +,015 -,007 +,010 +,005	- ,03 - ,16 + ,01 - ,13 + ,23
1076 1077 1078 1079 1080	3 4 4 4 3	- 5 57 14,05 +17 48 43,32 - 7 10 53,89 +27 22 43,24 +13 22 8,70	7,810 7,747 7,595 7,562 7,519	+9,4983 +9,9096	+8,6075  - -9,0725  - +8,6766  - -9,2391  - -8,9376  -	-0,8926 ,8891 ,8805 ,8766 ,8762	+9,9642 ,9648 ,9663 ,9666 ,9671	130 138 141	-,002 +,004 +,010 +,012 +,014	- ,12 - ,08 - ,01 - ,03 + ,04

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarithms of		
				Jan 1, 1836.	sion.	а	ь	С	d
1081	Serpentis	8 9	3	h. m. s. 16 32 34,98	+3,122	_8,3944	<b>—8,7920</b>	+0,4944	+7,0370
1082	Herculis	7.8	4	34 20,31	2,634		,8179		
1083	Ophiuchi	8.9	4	35 45,37	2,974	,3798	,7952	. ,4733	-7,2581
1084	Scorpii	8	4	36 55,62	3,892			,5902	
1085	Nebules	7	4	37 13,77	2,132	,4682	,8916	,3488	-8,2458
1086	Scorpii		,	39	4,180	-8,4856	<b>—8,9225</b>	+0,6212	
1087		9	3	41 18,67		,4754	,9235	,6214	
1088	Herculis	7.8	2	42 22,66	2,881		,8033	,4595	
1089	Scorpii	8	4	42 28,25	4,193		,9257	,6225	
1090				42	4,187	,4675	,9249	,6219	+8,2899 
1091	Draconis	9	3	42 55,40				+9,9886	-8,5621
1092	Scorpii	7.8	2	43 31,88		,4653	8,9271	0,6230	, ,
1093	Descrip	7.8 7.8	3	43 45,45	3,895		8,8770	0,5905	
1094 1095	Draconis Scorpii	7.0	3	45 4,42 45 12,22	4,153	,5792 ,4479	9,0492 8,9200	0,0842 0,6184	
•	1	~ 0				1			1
1096	Scorpii	7.8	2	45 15,90	3,898		<b>8,8782</b>	+0,5908	
1097 1098	Serpentis Ophiuchi	7.8 8	3 4	45 48,60 47 2,84	3,154 3,198		8,8019 8,8039	,49×9 , <b>50</b> 49	
1099	Draconis	8	4	47 16,96	1,497		9,0033	,5049	
1100	Scorpii	8	î	47 47,58	4,039	,4136	8,9019	,6063	
1101	Ophiuchi	7.8	3	49 22,35	3,400	<b>—8,3187</b>	<b>—8,8174</b>	  +0,53 <b>1</b> 5	+7,7207
1102		9	3	49 35,71	3,422	,3194	8,8194		
1103		9	3	50 42,20	3,482		8,8256	0,5418	1+7,8073
1104	Draconis	8	2	50 44,56	0,273		9,1855		
1105	Scorpii	9	3	51 51,30	3,867	,3607	8,8762	0,5874	+8,0851
1106		7.8	3	52 4,95				+0,4496	
1107		9	3	53 57,73	1,633	,4533	,9821		
1108	Scorpii	9	5	54 59,19	3,466	,2894	,8263	,5398	
1109 1110		7 8	4	56 45,21 57 12,03	2,602 3,346	,2848 ,2648	,8340 ,8174	,4153	7,8171  +7,5897
			*		}	1	,0174	,0240	77,0007
1111		9	1	59 33,91	3,471	-8,2585		+0,5404	
1112		8	4	17 1 13,12	2,399	,2784	,8610		<b>-7,940</b> 6
1113 1114		9	4	1 26,47	3,713	,2731	,8579	5797	+7,9226
1115		9 8 9	6	1 59,44 2 24,30	3,723 3,722	<b>,27</b> 00 ,2670	,8595 ,8596	,5709 ,5708	+ 7,9246 + 7,9213
		o.		·	,				!
1116 1117		8 7	4 3	3 51,22 4 16,12	2,883 2,479	<b>8,2119</b>		+0,4598	-7,3608
1118			4	4 10,12	2,478	,2453 ,2433	,8517 ,8519	,3943 ,3941	-7,8619 $-7,8602$
1119		8 8 9	3	5 4,54		,2765	,8906		+ 8,0188
1120		9	3	5 5,29	3,752	,2505	,8646		
1121	Herculis	9	4	6 46,94	2,732	8,1981	-8,8262	+0,4365	
1122		8	3	6 52,36	2,726	,1981	,8267	,4355	
1123	39 Ophiuchi	7	4	8 1,17	3,651	,2134	,8524	,5624	+7,8244
1124		7	2	8 52,21	2,490	,2067	,8521	,3962	-7,8146
1125	Ophiuchi	8	6	10 17,87	3,128	,1551	,8142	,4953	+6,8173

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	ms of		zi No.	Annual	Р. М.
	Obs.	·	sion.	a'	<i>b</i> ′	c'	d'	Piazzi	A. R.	Decn.
1081 1082 1083 1084 1085	4 4 3 4 4	- 2 30 41,61 +19 14 26,44 + 4 19 56,92 -33 23 33,20 +36 49 16,87	7,449 7,308 7,188 7,090 7,074	+9,5944 +9,8555 +9,7016 -9,1847 +9,9581	+8,2127 -9,0796 -8,4329 +9,2894 -9,3253	-0,8721 ,8638 ,8566 ,8507 ,8496	+9,9677 ,9690 ,9701 ,9710 ,9711	148 160 166 167 172	+,021 +,017	-0,35 -,11 -,09 +,05 -,03
1086 1087 1088 1089 1090	4 4 4	-41 32 -41 29 55,99 + 8 27 34,70 -41 42 43,12 -41 32	6,883 6,729 6,647 6,630 6,603	-9,4742 -9,4757 +9,7536 -9,4829 -9,4786	+9,3575 +9,3472 -8,6878 +9,3427 +9,3394	-0,8377 ,8279 ,8226 ,8215 ,8197	+9,9727 ,9740 ,9747 ,9748 ,9750	179 192 208 199 204	-,002 +,010 -,003	,01 ,05 ,00
1091 1092 1093 1094 1095	4 3 4 3 4	+58 57 5,71 -41 48 47,29 -33 11 43,42 +55 40 38,45 -40 33 8,14	6,608 6,542 6,525 6,432   6,404	+0,0137 9,4871 9,1903 +0,0116 9,4564	-9,4509 +9,3377 +9,2511 -9,4233 +9,3178	0,8201 ,8157 ,8146 ,8083 ,8064	+9,9750 ,9755 ,9757 ,9764 ,9766	217 209 211 229 218	+,015 -,012 +,020 +,027 +,008	- ,02 - ,09 - ,03 - ,19 - ,15
1096 1097 1098 1099 1100	4 4 4 4 4	-33 14 0,18 - 3 53 22,43 - 5 51 7,84 +51 2 56,18 -37 21 21,89	6,399 6,360 6,255 6,249 6,194	-9,1931 +9,5670 +9,5250 +0,0047 -9,3655	+9,2431 +8,3341 +8,5025 -9,3847 +9,2731	-0,8061 ,8034 ,7962 ,7958 ,7919	+9,9767 ,9769 ,9777 ,9778 ,9782	222 226 235 241 237	+,002 +,011 +,019 +,004 +,024	+ ,11 + ,04 - ,08 + ,05 - ,05
1101 1102 1103 1104 1105	4 4 2 4 4	-14 36 33,92 -15 33 5,52 -17 57 33,14 +65 28 19,22 -32 0 33,00	6,060 6,044 5,949 5,966 5,849	+9,2528 +9,2095 +9,0719 +0,0204 -9,1430	+8,8825 +8,9073 +8,9617 -9,4326 +9,1895	0,7825 ,7813 ,7745 ,7757 ,7671	+9,9792 ,9793 ,9800 ,9798 ,9807	244 245 254 264 259	+,001 +,014 +,006 +,032 +,001	- ,09 - ,23 + ,01 - ,23 - ,05
1106 1107 1108 1109 1110	4 4 4 4	+11 10 4,50 +48 14 54,50 -17 14 57,56 +19 55 28,11 -12 10 58,38	5,838 5,687 5,592 5,446 5,407	+9,7860 +0,0017 +9,1106 +9,8669 +9,3444	8,7513 9,3256 +8,9177 8,9664 +8,7559	-0,7662 ,7549 ,7476 ,7361 ,7329	+9,9807 ,9818 ,9824 ,9833 ,9836	262 275 274 287 288	+,014 +,005 +,015 +,005 +,005	+ ,02 + ,06 - ,09 - ,15 - ,09
1111 1112 1113 1114 1115	3 4 4 8 1	-17 20 55,50 +27 21 23,32 -26 29 22,80 -26 49 44,02 -26 48 41,14	5,204 5,069 5,047 4,996 4,962	+9,1001 +9,9185 -8,6434 -8,6990 -8,6990	+8,8889 -9,0652 +9,0506 +9,0512 +9,0480	,7049 ,7030 ,6986 ,6957	+9,9848 ,9856 ,9858 ,9861 ,9863	300 312 308 311 1	+,012 +,016 +,010 +,001 -,007	+ ,05 - ,06 - ,09 - ,02
1116 1117 1118 1119 1120	4 4 3 4 4	+ 8 6 2,67 +24 26 35,47 +24 27 23,15 -33 32 23,80 -27 46 16,45	4,849 4,815 4,792 4,736 4,736	+9,7536 +9,9009 +9,9015 -9,2430 -8,8388	8,5326 8,9972 8,9955 +9,1159 +9,0419	-0,6856 ,6826 ,6805 ,6754 ,6754	+9,9869 ,9871 ,9872 ,9875 ,9875	8 11 15 10 12	+,022 +,026 +,020 +,011 +,012	- ,07 - ,06 - ,11 + ,07 - ,09
1121 1122 1123 1124 1125	4 4 2 5 4	+14 29 44,79 +14 44 48,46 -24 5 49,65 +23 55 52,28 - 2 37 37,48	4,594 4,588 4,590 4,424 4,293	+9,8215 +9,8248 -7,3010 +9,8987 +9,5888	-8,7583 -8,7651 +8,9609 -8,9517 +7,9930	-0,6622 ,6616 ,6519 ,6458 ,6327	+9,9883 ,9883 ,9888 ,9892 ,9898	25 26 31 37 45	-,001 +,020 +,005 ,000 -,001	,42 ,16 ,05 ,01 ,08

No.	Star's name and	Mag.	No.	Right Ascension	Annual Preces-		Logarit	hms of	
			Obs.	Jan. 1, 1836.	sion.	а	ь	с	d
1126 1127 1128 1129 1130	Ophiuchi Serpentis Ophiuchi	7.8 8 8 8	4 4 3 4	h. m. s. 17 10 20,14 10 47,47 11 15,47 11 46,90 12 9,22	3,716 3,126 3,715 3,368 3,634	8,2019 ,1510 ,1935 ,1529 ,1767	8,8615 ,8143 ,8617 ,8254 ,8517	,4950	+7,8496  +6,8021  +7,8405  +7,5023  +7,7756
1 131 1 13 <b>2</b> 1 133 1 134 1 135	Herculis Draconis Ophiuchi Herculis	7 9 8 9 7	2 2 1 3 2	12 38,63 12 44,89 12 52,11 13 6,37 13 28,88	1,516 1,110 2,847 3,676 2,438	8,3259 ,3898 ,1383 ,1722 ,1719	9,0053 9,0699 8,8208 8,8573 8,8602	,4544 ,5654	-8,3097 -7,3596
1136 1137 1138 1139 1140	Scorpii Ophiuchi ————————————————————————————————————	8.9 8 8 8.9 8	3 2 3 1 4	13 36,73 14 4,17 14 4,76 14 59,11 15 49,88	3,526 2,839 3,642 3,280 3,749		,8217 ,8534	,4532 ,5613 ,5159	+7,6687 -7,3629 +7,7625 +7,3217 +7,8194
1141 1142 1143 1144 1145	Ophiuchi Herculis Ophiuchi Draconis	8 7 8.9 8	2 2 2 2 2 3	16 5,82 16 7,59 16 52,36 16 55,65 17 1,88	2,752 2,860 2.536 3,579 1,114	,1270 ,1239	8,8493	,4564 ,4041 ,5538	-7,4839 -7,3010 -7,7018 +7,6835 -8,2660
1146 1147 1148 1149 1150	Ophiuchi ————————————————————————————————————	8.9 9 7.8 9	3 3 3 2	18 1,91 18 19 29,00 19 62,82 20 4,32	2,699 2,678 3,285 2,869 1,287	,0974 ,0730	-8,8332 8,8351 8,8230 8,8222 9,0429	,4278 ,5165	-7,2417
1151 1152 1153 1154 1155	Ophiuchi Serpentis Ophiuchi ——— Draconis	9 7 9 8 8.9	2 2 3 2 2	20 7,08 21 4,27 21 18,84 21 27,13 21 34,10	<b>2,83</b> 9 3,433 2,996 3,299 1,503	,0474 ,0519	8,8338 8,8184 8,8244	,5184	-7,3011 +7,4927 -6,7851 +7,2901 -8,1724
1156 1157 1158 1159 1160	Herculis Ophiuchi ——— Serpentis	9 8 8 8	3 4 5 2 2	22 17,69 22 27,95 22 55,21 23 21,22 23 27,99	3,130 3,1 <b>2</b> 3 2.648	,0344 ,0289 ,0447	8,8518 ,8186 ,8186 ,8393 ,8328	,4955 ,4946	-7,6488 +6,7075 +6,6508 -7,5266 +7,4400
1161 1162 1163 1164 1165	Ophiuchi Herculis Ophiuchi	9 8.9 8 7.8 8	4 3 2 2 2	23 34,38 24 6,7× 24 42,98 24 43,93 25 31,42	3,064 3,626 2,266 2,368 3,671	-8,0206 ,0499 ,0760 ,0629 ,0372	8,8185 ,8543 ,8670 ,8739 ,8602	+0,4863 ,5594 ,3553 ,3726 ,6648	-5,4844 +7,6400 -7,7914 -7,7383 +7,6552
1166 1167 1168 1169 1170	53 Ophiuchi pro	ec. 8 7.8 7 7.8 8	3 5 4 3 4	26 49,37 27 24,54 28 13,67 28 59,33 29 24,25	2,842 3,520 2,783 2,557 2,792	,9719	-8,8256 ,8436 ,8295 ,8501 ,8293	,5465	7,2951 7,5383

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	ims of		zzi No.	Annual	P. M.
			sion.	a'	b'	c'	ď	Piazzi	A. R.	Decn.
1126 1127 1128 1129 1130	4 3 3 4 2	-26 22 22,63 - 2 34 11,87 -26 19 37,42 -12 54 35,42 -23 24 11,33	-4,287 4,253 4,207 4,167 4,144	-8,6532 +9,5911 -8,6632 +9,3117 +8,0000	+8,9779 +7,9778 +8,9690 +8,6672 +8,9144	-0,6321 ,6287 ,6240 ,6198 ,6175	+9,9898 ,9900 ,9902 ,9904 ,9906	41 46 48 56 57	+,001	+ ,04 + ,02 - ,02 - ,11 - ,06
1131 1132 1133 1134 1135	4 2 2 2 4	+49 52 6,08 +56 15 38,42 + 9 35 31,69 -24 65 57,66 +25 42 33,81	4,104 4,099 4,076 4,053 4,025	+0,0124 +0,0232 +9,7716 -8,2787 +9,9117	—9,1947 —9,2305 —8,5296 +8,9307 —8,9399	,6126 ,6102	+9,9907 ,9907 ,9908 ,9909 ,9911	69 72 66 62 71	+,026 +,033	- ,21 - ,04 - ,20 - ,16 - ,07
1136 1137 1138 1139 1140	3 3 2 4 4	-19 17 2,17 + 9 54 6,56 23 40 49,47 - 9 11 47,54 27 26 32,16	4,007 3,973 3,967 3,893 3,819	+8,9395 +9,7745 +7,4771 +9,4330 -8,8261	+8,8197 -8,5325 +8,9004 +8,4921 +8,9436	-0,6029 ,5991 ,5985 ,5903 ,5819	+9,9911 ,9913 ,9913 ,9916 ,9920	67 74 70 79 82	+,018 +,008 +,006	- ,06 - ,18 - ,01 - ,09 + ,02
1141 1142 1143 1144 1146	4 3 2 3 2	+13 33 30,21 + 9 0 39,74 +22 4 34,79 -21 15 42,73 +56 5 56,86	3,802 3,796 3,733 3,727 3,727	+9,8142 +9,7657 +9,8870 +8,6812 +0,0241	-8,6477 -8,4717 -8,8449 +8,8290 -9,1885	-0,5800 ,5793 ,5720 ,5714 ,5714	+9,9920 ,9921 ,9923 ,9924 ,9924	85 84 92 89 101	+,006	- ,14 - ,10 + ,06 - ,05 + ,04
1146 1147 1148 1149 1150	3 4 3 2	+15 42 3,62 +16 32 1,72 9 21 26,00 + 8 35 13,65 +53 30 1,26	3,635 3,607 3,509 3,475 3,469	+9,8351 +9,8426 +9,4281 +9,7604 +0,0212	-8,6909 -8,7093 +8,4548 -8,4129 -9,1434	0,5605 ,5571 ,5452 ,5409 ,5402	+ 9,9927 ,9928 ,9932 ,9934 ,9934	102 104 107 108 116	+,006	,09 + ,04 ,07 ,23 ,18
1151 1152 1153 1154 1155	4 4 3 2 3	+ 9 53 36,97 -15 29 57,26 + 3 8 34,61 - 9 57 38,98 +53 16 26,95	3,452 3,372 3,348 3,337 3,337	+9,7752 +9,1903 +9,6875 +9,4082 +0,0212	-8,4707 +8,6527 -7,9605 +8,4596 -9,1252	0,5380 ,5278 ,5248 ,5233 ,5233	+9,9935 ,9938 ,9938 ,9939	111 114 119 118 124	+,004 +,011	- ,08 - ,18 - ,27 - ,28 + ,03
1156 1157 1158 1159 1160	3 3 2 3	+22 16 28,74 - 2 41 36,72 - 2 24 12,76 +17 38 45,84 -14 39 55,04	3,268 3,251 3,210 3,176 3,164	+9,8899 +9,5877 +9,5944 +9,8531 +9,2304	-8,7911 +7,8831 +7,8265 -8,6816 +8,6017	0,5143 ,5120 ,5065 ,5018 ,5003	+9,9941 ,9942 ,9944 ,9945 ,9945	123 122 126 133 129	+,013 +,006 -,010 +,006 +,024	- ,10 ,00 - ,17 - ,09 - ,17
1161 1162 1163 1164 1165	2 2 3 3 4	+ 0 10 10,02 -22 54 17,03 +31 17 9,22 +28 15 54,70 -24 30 28,07	3,153 3,107 3,061 3,061 2,980	+9,6345 +8,2041 +9,9464 +9,9299 -8,2304	6,6604 +8,7804 8,8992 8,8592 +8,7902	0,4987 ,4923 ,4858 ,4858 ,4742	+9,9946 ,9947 ,9949 ,9949 ,9951	132 134 143 141 142	+,013 +,006 +,017 +,017 -,008	- ,17 - ,07 + ,02 - ,02 - ,05
1166 1167 1168 1169 1170	3 4 4 4 4 4	+ 9 41 26,49 -18 52 41,28 +12 9 31,07 +21 6 23,03 +11 45 46,71	2,876 2,818 2,755 2,691 2,651	+9,7738 +8,9590 +9,8007 +9,8814 +9,7973	-8,3827 +8,6581 -8,4613 -8,6843 -8,4303	-0,4588 ,4500 ,4401 ,4300 ,4234	+9,9955 ,9957 ,9958 ,9960 ,9962	149 152 158 163 165	+,016 +,018	- ,22 - ,05 + ,05 - ,01 + ,03

No.	Star's name and Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
		O Usi	Jan. 1, 1836.	sion.	а	ь	c	<b>d</b> ·
1171 1172 1173 1174 1175	Ophiuchi 8 8.9 Herculis 8 Ophiuchi 9 7.8	3 2 2 2 1	h. m. s. 17 30 10,93 30 21,27 30 27,80 30 50,25 30 52,00	*. +2,792 3,329 2,568 3,651 3,019	7,9431 ,9392 ,9598 ,9624 ,9243	8,8295 ,8286 ,8492 ,8589 ,8207	+0,4459 ,5223 ,4096 ,5624 ,4799	-7,2531 +7,2262 -7,5069 +7,5674 -6,4917
1176 1177 1178 1179 1180	Ophiuchi 7 —— 8 —— 7.8 Herculis 7.8 Ophiuchi 8	4 3 3 2 3	31 26,25 32 7,96 32 36,85 32 56,46 34 35,20	2,752 2,753 3,097 2,463 2,845	7,9279 ,9165 ,8974 ,9340 ,8714	—8,8326 ,8327 ,8209 ,8619 ,8273	+0,4396 ,4398 ,4909 ,3915 ,4541	
1181 1182 1183 1184 1185	Ophiuchi 8 7.8 7 7	3 2 2 2 2 2	34 49,89 34 56,44 34 59,31 35 32,29 35 45,14	3,603 3,231 2,654 2,370 2,458	7,8923 ,8617 ,8786 ,9021 ,8858	8,8540 ,8 <b>2</b> 46 ,8415 ,8744 ,8630	+ 0,5567 ,5093 ,4239 ,3747 ,3906	+7,4646 +6,9476 7,3523 7,5699 7,5060
1186 1187 1188 1189 1190	Draconis 8 Ophiuchi 8 61 —— seq. 7.8 —— 7.8 Draconis 8	3 3 4 4 2	36 36 14,24 36 21,34 36 48,22 36 53,67	2,740	8,2844 7,8381 7,8339 7,8376 8,0495	9,2652 8,8238 8,8221 8,8346 9,0465	9,5752 +0,4673 ,4781 ,4377 ,1062	
1191 1192 1193 1194 1195	Ophiuchi 8.9 7.8 8.9 8 Telescopii 7	3 1 2 2 3	37 31,91 38 8,84 38 44,51 39 0,46 40 0,91		,7834	8,8241 ,8241 ,8242 ,8243 ,9426	+0,4673 ,4676 ,4678 ,4675 ,6247	-6,7993
1196 1197 1198 1199 1200	Sagittarii         7           —         8           Tauri Pon.         8           Herculis         7           —         8	3 5 3 4	41 26,17 42 1,99 42 3×,43 42 38,54 42	3,545 2,897	,7383 ,70 <b>24</b> ,8165	8,9057 ,8488 ,8262 ,9386 ,9080	,5496 ,4619 ,2898	+7,5596 +7,2664 6,8064 7,6248 +7,5315
1201 1202 1203 1204 1205	Ophiuchi 9 8 V 1 Draconis seq. 7 Ophiuchi 8 7	2 3 3 3 3	43 43,35 44 3,96 44 53,95 45 3,53 45 33,73	3,549 —1,093 [+3,632	7,6868 8,1588 7,6675		+0,5468 + ,5501 ,0386 + ,5601 + ,4919	+7,2021 +7,2177 -8,1376 +7,2585 +6,0527
1206 1207 1208 1209 1210	Serpentis 7.8 Telescopii 7 Herculis 7.8 Serpentis 8 Ophiuchi 8	4 3 3 2	45 46,82 46 9,03 46 47 22,99 47 47,23	4,256 1,564 3,440	-7,6185 ,7238 ,7687 ,5733 ,5668	8,8320 8,9499 9,0013 8,8397 8,8474	+0,5240 ,6290 ,1942 ,5366 ,5472	+6,9219 +7,5466 -7,6427 +7,0043 +7,0772
1211 1212 1213 1214 1215	Tauri Pon. 7 7 Ophiuchi 7.8 Herculis 7 8	3 2 1 2 4	47 57,07 48 46,98 49 11,74 49 13,11 49 59,09	2,951	-7,5396 ,5092 ,5079 ,5115 ,6157	8,8251 ,8251 ,8425 ,8461 ,9785	+0,4694 ,4700 ,5406 ,4191 ,2317	-6,4955 -6,4510 +6,9697 -7,0096 -7,4695

No.	No.	Declination	Annual Preces-		Logarit	hms of		zi No.	Annua	l P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	<b>b</b> '	c'	<i>d'</i>	Piazzi	A.R.	Decn.
1171 1172 1173 1174 1175	4 3 2 3 3	+11 47 33,18 -11 10 1,20 +20 42 3,71 -23 44 20,86 + 2 7 44,61	-2,581 2,564 2,564 2,524 2,524	+9,7973 +9,3692 +9,8785 -7,4771 +9,6730	+8,3940 -8,6550	0,4119 ,4039 ,4089 ,4020 ,4020	+9,9964 ,9964 ,9964 ,9965 ,9965	171 170 175 173 177	+,013	- ,02 - ,11 - ,01 - ,01 + ,02
1176 1177 1178 1179 1180	3 2 4 3 3	+13 25 34,89 +13 22 52,34 - 1 18 16,59 +24 30 33,58 + 9 32 2,27	2,477 2,414 2,373 2,350 2,205	+9,8142 +9,8136 +9,6075 +9,9069 +9,7730	8,4576 8,4450 +7,4347 8,6871 8,2606	1,3940 ,3827 ,3753 ,3711 ,3434	+9,9966 ,9968 ,9969 ,9970 ,9973	183 185 187 191 199	+,013 +,010 +,016 +,014 +,011	+ ,01 ,00 - ,06 - ,06 - ,14
1181 1182 1183 1184 1185	4 4 2 2 3	-21 56 30,42 - 6 59 48,99 +17 18 53,66 +27 43 39,23 +24 39 4,61	2,176 2,170 2,170 <b>2</b> ,124 2,101	+8,5051 +9,4914 +9,8513 +9,9279 +9,9079	+8,6081 +8,1205 8,5083 8,6930 8,6406	-0,3377 ,3365 ,3365 ,3272 ,3224	+9,9974 ,9974 ,9974 ,9975 ,9976	197 202 205 212 213	,006 +,014 +,011 +,019 +,002	- ,07 - ,06 + ,02 - ,06 - ,19
1186 1187 1188 1189 1190	1 1 3 3 3	+68 54 10,36 + 5 47 36,33 + 2 39 21,53 +13 51 38,13 +53 25 11,67	2,083 2,060 2,049 2,008 2,008	+0,0350 +9,7269 +9,6803 +9,8189 +0,0245	8,9867 8,0165 7,6745 8,3804 8,9055	-0,3188 ,3139 ,3115 ,3028 ,3028	+9,9976 ,9977 ,9977 ,9978 ,9978	232 214 216 219 224	+,021 -,001 +,007 -,035	+ ,11 - ,08 - ,11 + ,02 - ,14
1191 1192 1193 1194 1195	2 3 3 3 3 3	+ 5 47 22,99 + 5 43 45,24 + 5 38 0,80 + 5 45 34,93 -40 42 49,14	1,944 1,892 1,840 1,816 1,724	+9,7259 +9,7251 +9,7243 +9,7259 —9,5065	7,9901 7,9733 7,9560 7,9581 +8,7489	-0,2887 ,2769 ,2648 ,2592 ,2364	+9,9979 ,9980 ,9982 ,9982 ,9984	222 230 234 235 236	+,016 +,005 +,017 +,012 +,009	- ,05 - ,19 - ,12 - ,10 - ,17
1196 1197 1198 1199 1200	4 5 4 2	-34 21 49,56 -19 43 18,59 + 7 17 7,20 +40 1 55,72 -34 44	1,596 1,549 1,503 1,509 1,474	-9,3096 +8,8573 +9,7459 +9,9881 -9,3243	+8,6525 +8,4163 -7,9789 -8,6850 +8,6223	0,2030 ,1901 ,1769 ,1786 ,1684	+9,9986 ,9987 ,9988 ,9988 ,9988	251	-,016 +,015 -,003 +,008	- ,03 - ,16 - ,05 - ,02
1201 1202 1203 1204 1205	3 4 2 4 3	-18 49 45,28 -19 50 34,56 +72 14 9,93 -22 56 23,95 -1 34 37,23	1,404 1,375 1,323 1,287 1,241	+8,9494 +8,8388 +0,0342 +8,0414 +9,6096	+8,3543 +8,3672 -8,7982 +8,3988 +7,2286	-0,1473 ,1383 ,1214 ,1098 ,0938	+9,9989 ,9990 ,9990 ,9991 ,9992	264 287	+,026 +,002 +,013 +,004 ,000	+ ,09 - ,07 - ,27 + ,04 - ,02
1206 1207 1208 1209 1210	3 4 1 2 2	-11 35 41,88 -41 40 57,42 +48 26 31,26 -15 39 6,88 -18 54 23,82	1,224 1,189 1,171 1,084 1,049	+9,3502 -9,5315 +0,0149 +9,1732 +8,9445	+8,0890 +8,5959 -8,6407 +8,1640 +8,2292	-0,0876 ,0751 ,0686 ,0350 ,0208	+9,9992 ,9992 ,9992 ,9994 ,9994	272 288 284	+,002	- ,04 - ,03 - ,04 - ,04 - ,06
1211 1212 1213 1214 1216	3 4 3 3	+ 5 11 34,62 + 5 0 42,00 -16 49 55,31 +18 21 22,72 +45 34 59,96	1,037 0,967 0,927 0,927 0,868	+9,7177 +9,7152 +9,1004 +9,8609 +0,0077	7,6698 7,6254 +8,1268 8,1630 8,4906	-0,0159 9,9856 9,9669 9,9369 9,9387	+9,9994 ,9995 ,9995 ,9996 ,9996	296 297 300	+,010	- ,10 - ,06 - ,03 - ,04 + ,03

No.	Star's name and I	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
				Jan. 1, 1836.	sion.	а	ь	c	<u>d</u>
1216 1217 1218 1219 1220	Serpentis Draconis Sagittarii	7.8 7.8 8 7.8 7.8	3 4 3 3 2	h. m. s. 17 50 21,03 50 27,33 51 28,13 52 35,65 53 17,36	5. +3,186 0,715 3,503 3,670 3,971	7,4384 ,7466 ,4064 ,3571 ,3560	—8,8252 9,1303 8,8456 ,8638 ,9054	+0,5032 9,8543 0,5444 ,5647 ,5989	+6,3816 -7,6860 +6,8979 +6,9706 +7,1041
1221 1222 1223 1224 1224	Herculis Sagittarii Tauri Pon. Sagittarii Herculis	8 8.9 8.9 9	2 3 2 4	53 38,33 53 54 6,82 54 19,87 54 33,74	2,732 3,639 2,965 3,540 2,507	7,2694 ,2830 ,2183 ,2270 ,2205	,8601 ,8250	,5490	+6,8773 $-6,1015$
1226 1227 1228 1229 1230	Herculis Telescopii Sagittarii	8 7.8 8 8 8.9	3 2 3 3 3	55 35,31 55 49,24 56 23,89 57 27,59 57 50,95		-7,1020 7,1972 7,0423 6,8861 6,7824	8,8389 ,9626 ,8795 ,8909 ,8563	,6367	-6,5155 +7,0342 +6,7192 +6,5982 +6,3535
1231 1232 1233 1234 1235	Tauri Pon. Sagittarii Tauri Pon.	7.8 7 7 7.8 8	2 2 2 3 2	58 13,48 58 48,79 59 4,27 59 18,62 59 43,87	2,747 3,594 3,723 2,911 2,845	-6,6800 6,4650 6,3344 6,1937 5,2936			-6,0476 +6,0284 +5,9780 -5,2607 +4,5105
1236 1237 1238 1239 1240	Sagittarii 100 Herculis <i>præd</i> Ophiuchi	9 7.8 5. 6.7 8 8.9	2 2 5 3 3	18 0 6,52 0 55,74 1 13,01 1 27,07 1 59,57	3,657 3,714 2,414 2,441 2,785	+6,0252 ,5636 ,6565 ,7111 ,8157	8,8625 ,8694 ,8705 ,8671 ,8334	+0,5631 ,5698 ,3827 ,3876 ,4448	-6,2021 +6,2996
1241 1242 1243 1244 1245	Herculis Sagittarii Tauri Pon.	7 8 7.8 8.9 7.8	4 4 3 4 4	2 54,21 4 30,55 4 53,73 5 5,02 6 13,64	2,283 2,150 3,939 3,664 2,847	+7,0147 ,2168 ,2512 ,2301 ,2757	8,8881 ,9079 ,9009 ,8632 ,8296	5640	+6,9701 $-6,9888$ $-6,8399$
1246 1247 1248 1249 1250	Sagittarii Tauri Pon. Cly. Sob. Sagittarii Tauri Pon.	8 7.8 8.9 7.8 7.8	3 4 4 3 2	7 29,20 9 22,23 9 34,29 9 53,38 10 14,53	4,085 2,784 3,469 4,152 2,789	+7,4513 ,4525 ,4736 ,5793 ,4899		+0,6112 ,4447 ,5402 ,6183 ,4454	6,9324 7,3790
1251 1252 1253 1254 1255	Cly. Sob. Sagittarii Draconis	8.9 8 8.9 7.8 8.9	3 2 3 3 1	11 46,99 11 51,51 12 8,66 13 10,52 14 29,91		+7,5608 ,5632 ,6051 ,6762 8,0613	8,8414 ,8414 ,8714 ,9066 9,2606	+0,5393 ,5393 ,5721 ,6001 9,5211	-7,0149 -7,2544
1256 1257 1258 1259 1260		7.8 7 8 8 8.9	4 3 3 2 3	15 21,44 17 4,39 18 50,47 19 11,78 19 13,87	3,096 2,951 3,693 3,954 3,953		8,8230 ,8243 ,8656 ,9020 ,9017	+0,4908 ,4700 ,5674 ,5970 ,5969	7,4148  7,5743

No.	No. Obs.	Declination	Annual Preces-		Logarit	hms of		zi No.	Annua	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
1216 1217 1218 1219 1220	4 2 2 3 3	-5 1 37,57 +60 25 39,26 -18 3 28,05 -24 14 43,66 -34 2 51,10	-0,823 0,827 0,728 0,624 0,566	+9,5366 +0,0346 +9,0128 -8,1461 -9,3010	+7,5560 -8,5553 +8,0521 +8,1066 +8,1986	,9179 ,8625 ,7950	+9.9996 ,9996 ,9997 ,9998 ,9998	305 315 308 319 325	s. +,012 +,004 -,007 -,017 +,019	- ,24 - ,09 ,00 - ,01
1221 1222 1223 1224 1225	2 3 2 3 4	+14 7 47,19 -23 7 53,96 + 4 22 51,34 -19 27 21,19 +22 46 53,72	0,543 0,530 0,496 0,476 0,462	+9,8228 +7,7781 +9,7067 +8,8×08 +9,8960	-7,8199 +8,0170 -7,2765 +7,9003 -7,9493	-9,7341 ,7247 ,6951 ,6795 ,6633	+9,9998 ,9998 ,9999 ,9999 ,9999	336 330 340 338 345	+,014 +,012 +,002 +,016	- ,12 ,00 - ,29 - ,16 - ,02
1226 1227 1228 1229 1230	3 3 3 3 4	+15 0 13,35 -43 23 49,66 -28 22 5,17 -31 0 46,67 -21 52 18,10	0,367 0,343 0,291 0,199 0,169	+9,8312 9,5705 8,9685 9,1553 +8,4914	7,6765 +8,0716 +7,8397 +7,7072 +7,4972	—9,5650 ,5365 ,4646 ,2972 ,2281	+9,9999 ,9999 ,9999 0,0000 ,0000	350 346 351 355 360	+,019 +,003 +,016 +,019 +,021	- ,22 + ,07 + ,04 - ,09 - ,03
1231 1232 1233 1234 1235	3 3 3 2	+13 28 34,18 -21 27 50,07 -26 7 3,63 + 6 41 31,00 + 9 28 45,97	0,140 0,032 0,058 0,046 0,006	+9,8162 +8,5798 -8,6990 +9,7388 +9,7730	-7,2116 +7,1733 +7,1074 -6,4338 -5,6806	—9,1459 8,9118 8,7657 8,6688 7,7657	+0,0000 ,0000 ,0000 ,0000 ,0000	363 364 365 371 376	-,020 +,006 ,000 -,001 +,012	- ,06 - ,01 - ,27 - ,07 - ,22
1236 1237 1238 1239 1240	1 3 3 2 4	-23 47 30,02 -25 47 13,77 +26 4 43,26 +25 9 20,63 +11 56 48,48	+0,029 0,099 0,122 0,140 0,192	7,7781 8,6434 +9,9191 +9,9127 +9,8007	6,7686 7,3326 +7,4291 +7,4723 +7,2983	+8,4647 8,9961 9,0879 9,1459 9,2842	+ 0,0000 ,0000 ,0000 ,0000 ,0000	375 383 389 391 3	+,016 +,014 +,017 +,014 +,001	+ ,10 - ,09 + ,07 - ,17 - ,20
1241 1242 1243 1244 1245	5 3 4 4 4	+30 26 17,31 +34 31 36,86 -33 7 53,72 -24 2 14,72 + 9 24 1,78	0,268 0,408 0,449 0,466 0,558	+9,9445 +9,9652 -9,2624 -8,0414 +9,7716	+7,8311 +8,0621 -8,0878 -7,9766 +7,6590	+9,4284 ,6108 ,6521 ,6687 ,7479	+0,0000 9,9999 0,0000 ,0000 9,9998	6 13 9 12 19	+,016 +,010 +,012 -,001 +,004	- ,05 - ,09 - ,06 - ,01 - ,19
1246 1247 1248 1249 1250	5 4 3 4 4	-37 16 34,15 +12 1 0,99 -16 42 49,25 -39 4 55,46 +11 49 22,11	0,677 0,833 0,857 0,886 0,909	-9,4150 +9,8007 +9,1106 -9,4669 +9,7993	8,3104 +7,9374 8,0898 8,4451 +7,9686	+9,8301 ,9209 ,9329 ,9474 ,9587	+9,9997 ,9996 ,9996 ,9996 ,9995	22 30 29 28 35	-,002 +,009 +,007 +,005 +,023	- ,11 + ,10 - ,08 - ,08 - ,08
1251 1252 1253 1254 1255	3 4 4 4 3	-16 26 30,25 -16 26 23,89 -26 29 5,63 -34 24 28,51 +68 35 1,40	1,049 1,055 1,084 1,177 1,305	+9,1271 +9,1271 -8,7559 -9,3139 +0,0362	8,1704 8,1728 8,3823 8,5208 +9,7688	+0,0208 ,0232 ,0350 ,0708 ,1019	+9,9994 ,9994 ,9994 ,9992 ,9991	40 41 44	+,011 +,001 +,012 +,004 -,054	- ,18 - ,07 - ,08 - ,11 + ,08
1256 1257 1258 1259 1260		- 1 13 26,48 + 4 59 57,85 -25 8 15,68 -33 38 41,69 -33 35 32,02	1,358 1,508 1,666 1,695 1,700	+9,6159 +9,7152 -8,4771 -9,2810 -9,2787	-7,1578 +7,8169 -8,5477 -8,6707 -8,6716	+0,1327 ,1786 ,2216 ,2291 ,2305	+9,9990 ,9988 ,9985 ,9984 ,9984	65 68 69	+,012 +,013 -,002 +,028 +,015	— ,09 — ,15 — ,20 — ,13 — ,01

No.	S tar's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
				Jan 1, 1836.	sion.	а	ь	c	d
1261 1262 1263 1264 1265	Serpentis Herculis Sagittarii	8.9 7.8 7.8 8 7.8	3 3 3 3 3 3	h. m. s. 18 19 26,58 19 53,80 20 5,36 20 22,83 21 38,53		,8134 ,8176 ,8168	,8699 ,8699	+0,4866 ,3817 ,3817 ,5641 ,5947	+5,0657 +7,4608 +7,4651 -7,4286 -7,6159
1266 1267 1268 1269 1270	Cor. Aust. Sagittarii	8 7.8 7.8 7.8 8.9	5 2 3 3 2	22 4,50 23 19,86 25 34,38 25 37,51 26 44,86	4,138 3,933 3,577 3,477 3,815	,9126 ,904 <b>2</b>		,5947	
1271 1272 1273 1274 1275	Lyræ Sagittarii Cly. Sob.	8.9 8 7.8 8 7.8	2 2 2 3 2	26 50,86 27 14,17 27 43,32 28 49,63 29 32,48	3,822 2,003 3,950 3,242 2,803	8,007 <b>4</b> 7,9893 7,928 <b>7</b>	,9288 ,9001 ,8241	+0,5823 ,3017 ,5966 ,5108 ,4476	-7,6496 +7,8039 -7,7325 -7,0424 +7,2348
1276 1277 1278 1279 1280	Sagittarii Tauri Pon. Cly. Sob.	7.8 8 8 8	5 3 2 3 3	29 39,85 30 28,75 30 42,73 31 34,50 33 25,77	3,854 3,116	8,0155 7,9531	8,8286 ,8854 ,8202 ,8341 ,8229	+0,4479 ,5859 ,4936 ,5330 ,5108	+7,2341 7,7231 6,5171 7,3821 7,1078
1281 1282 1 <b>9</b> 83 1284 1 <b>2</b> 85	Tauri Pon. Draconis	7 7.8 7.8 7 7.8	1 3 5 3 3	33 35,52 33 51,07 34 12,39 35 41,53 35 59,66	2,784 0,192	,0084 ,3948	8,9340 8,8288 8,8288 9,1984 8,8232	0,4447	7,9137 +7,3256 +7,3304 +8,3533 +7,1934
1286 1287 1288 1289 1290	Antinoi Draconis	7 8.9 7.8 8 7	2 1 3 3 3	36 4,49 36 50,42 37 14,48 38 12,02 38 32,63	3,146 3,216 0,411	,3963	9,1524 8,8190 8,8208 9,1704 8,9233	0,5073 9,6138	+8,2996 -6,8025 -7,0857 +8,3486 +7,9483
1291 1292 1293 1294 295	Lyræ Draconis Sagittarii	8.9 8 9.10 7.8 8	3 3 2 3 3	39 7,70 39 10,43 39 55,23 40 25,15 40 48,08	2,152 1,125 3,737	3147	8,9032 9,0684	+ 0,5510 ,3328 ,0511 ,5725 ,5576	<b>—7,776</b> 9
1296 1297 1298 1299 1300	Antinoi Lyræ Antinoi —— Draconis	7 8 8 8	2 3 3 2	40 54,48 41 17,74 41 57,24 42 20,35 42 21,17	3, <b>20</b> 9 2,355 3,299 3,217 —1,174	+8,0781 ,1343 ,0918 ,0927 ,6164	8.8193 8,8727 8,8231 8,8191 9,3456	+0,5064 ,3720 ,5184 ,5074 ,0697	7,1044 +7,8125 7,3301 7,1432 +8,5964
1301 1302 1303 1304 1305	Lyræ Draconis Herculis Sagittarii Lyræ	7.8 7 8.9 9 8.9	3 3 3 3	42 21,59 42 38,90 42 43,54 43 19,00 44 3,67		+8,1644 ,4164 ,1316 ,1244 ,1837	8,8908 9,1414 8,8546 8,8413 8,8930	+0,3479 9,7945 0,3964 0,5475 0,3446	+7,8958 +8,3614 +7,7361 -7,6436 +7,9217

No.	No.	Declination	Annual Preces-		Logarith	ms of		zi No.	Annua	l P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	d'	Piazzi	A.R.	Decn.
1261	4	+ 0 6 19,57	+1,718	+9,6395	+6,2418	+0,2350	+9,9984	77		- ,19
1262	3	+ 26 22 12,50	1,753	+9,9196	+8,5892	,2437	,9983	83		+ ,06
1263	5	+ 26 21 26,11	1,770	+9,9196	+8,5935	,2480	,9983	84		+ ,08
1264	4	- 24 9 47,71	1,799	-8,0414	-8,5507	,2551	,9983	81		+ ,07
1265	5	- 33 2 42,87	1,909	-9,2528	-8,7154	,2809	,9980	87		- ,01
1266	2	-38 49 42,20	1,950	9,4564	8,7852	+0,2900	+9,9979	90	+,002	- ,04
1267	2	-33 4 48,88	2,060	9,2528	8,7488	,3139	,9977	97	+,002	- ,09
1268	4	-20 57 41,65	2,251	+8,6902	8,6042	,3525	,9972	110	+,029	- ,12
1269	4	-17 6 23,00	2,310	+9,0899	8,5200	,3536	,9972	111	+,013	- ,16
1270	4	-29 21 50,11	2,356	9,0374	8,7607	,3721	,9970	117	+,009	- ,09
1271 1272 1273 1274 1275	3 4 4	-29 36 1,76 +38 44 43,21 -33 36 33,93 - 7 27 53,69 +11 17	2,362 2,385 2,443 2,530 2,587	-8,1139 +9,9818 -9,2742 +9,4786 +9,7924	8,7649 +8,8720 8,8291 8,2148 +8,4024	+0,3732 ,3774 ,3879 ,4030 ,4128	+9,9970 ,9969 ,9967 ,9965 ,9963	118 126 122 130 133	-,006 +,028 +,008 -,018 +,007	— , <b>0</b> 5 — ,10 — ,02 — ,03
1276	4	+11 13 24,10	2,599	+9,7917	+8,4018	+0,4148	+9,9963	134	+,017	+ ,01
1277	3	-30 40 10,67	2,630	-9,1206	-8,8337	,4218	,9961	136	+,001	- ,22
1278	2	- 2 5 20,71	2,697	+9,5999	-7,6929	,4309	,9960	138	+,020	- ,08
1279	3	-14 39 0,39	2,772	+9,2304	-8,5438	,4428	,9958	140	+,012	- ,15
1280	4	- 7 29 12,86	2,934	+9,4786	-8,2802	,4674	,9953	152	+,017	- ,02
1281	4	-39 53 56,18	2,951	-9,4786	8,9749	+0,4700	+9,3952	148	-,023	,42
1282	3	+12 5 14,69	2,968	+9,8000	+8,4920	,4725	,9952	154	+,009	+ ,05
1283	3	+12 6 19,59	2,997	+9,8007	+8,4968	,4767	,9951	156	+,013	,03
1284	4	+65 20 28,96	3,112	+0,0326	+9,1496	,4931	,9947	173	+,009	,08
1285	4	+ 8 28 4,57	3,149	+9,7589	+8,3642	,4982	,9946	163	+,011	,10
1286	2	+62 22 43,68	3,135	+0,0318	+9,1418	+0,4963	+9,9946	174	+,054	+ ,04
1287	4	- 3 23 36,30	3,227	+9,5740	-7,9779	,5089	,9943	168	+,002	- ,06
1288	3	- 6 25 0,97	3,256	+9,5065	-8,2590	,5127	,9942	171	+,019	- ,14
1289	4	+63 38 22,03	3,325	+0,0318	+9,1721	,5218	,9939	190	,012	- ,04
1290	4	+38 22 6,93	3,371	+9,9786	+9,0187	,5278	,9938	182	,009	- ,05
1291 1292 1293 1294 1295	4 3 3	-20 19 41,13 +34 50 24,69 +55 53 -26 56 58,53 -22 26 48,43	3,417 3,423 3,480 3,538 3,567	+8,8129 +9,9633 +0,0245 -8,7708 +8,3979	-8,7726 +8,9892 +9,1576 -8,9031 -8,8322	+0,5337 ,5344 ,5416 ,5487 ,5522	+9,9936 ,9936 ,9933 ,9931 ,9930	180 188 198 191 194	+,018 ,006 +,047 +,010 ,000	- ,14 - ,06 - ,14 - ,01
1296	2	- 6 5 29,16	3,578	+9,5132	-8,2781	+0,5536	+9,9930	197	+,012	- ,06
1297	2	+28 28 4,28	3,601	+9,9294	+8,9326	,5564	,9929	200	+,003	- ,06
1298	3	- 9 57 32,51	3,658	+9,4099	-8,4995	,5633	,9926	201	+,005	- ,15
1299	3	- 6 27 49,03	3,698	+9,5065	-8,3166	,5680	,9925	204	+,010	- ,02
1300	2	+72 47 49,95	3,675	+0,0282	+9,2435	,5653	,9926	221	+,001	- ,01
1301	2	+32 35 55,53	3,707	+9,9518	+8,9974	+0,5690	+9,9925	207	+,005	,08
1302	2	+61 46 1,66	3,710	+0,0298	+9,2124	,5694	,9924	212	,009	+ ,10
1303	2	+23 42 51,03	3,727	+9,8987	+8,8739	,5714	,9924	209	+,017	,08
1304	3	—19 18 33,29	3,779	+8,9294	-8,7946	,5773	,9921	208	+,019	,05
1305	2	+33 9 56,67	3,842	+9,9542	+9,0206	,5845	,9919	216	+,015	,05

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
				Jan. 1, 1836.	sion.	a	ь	c	d
1306 1307 1308 1309 1310	Sagittarii Lyræ Herculis Lyræ Serpentis	8 8 7.8 8 6.7	3 2 4 2	h. m. s. 18 45 1,95 47 16,95 47 23,25 47 59,94 48 10,53	s. +3,806 1,826 2,588 1,827 3,016	,2760 ,1651 ,2819	,9541 , <b>842</b> 0	,2615 ,4130 ,2617	
1311 1312 1313 1314 1315	o Draconis pr. Sagittarii Aquilæ Sagittarii Aquilæ	8.9 8.9 8 8 7.8	3 2 4 4 3	48 45,46 49 42,27 51 2,88 51 28,40 51 45,64	0,877 3,769 3,137 3,633 2,721	+8,4395 ,2138 ,1705 ,2112 ,1903	-9,1047 8,8687 ,8136 ,8502 ,8275	0,576 <b>2</b> ,4965	7,8892 6,8965
1316 1317 1318 1319 1320	Aquilæ Antinoi pr. —— seq Sagittarii Lyræ	8.9 8 8 8.9 8.9	3 5 2 3 3	52 28,84 54 18,10 54 19,08 54 46,38 54 47,74	<b>2,727 3,089 3,090 3,674 1,689</b>	+8,1958 ,1958 ,1963 ,2427 ,3629	8,8268 ,8116 ,8116 ,8541 ,9754	,4900 ,5651	+7,5998 -6,4077 -6,4159 -7,8692 +8,2252
1321 1322 1323 1324 1325	Aquilæ Sagittarii Lyræ Aquilæ	8.9 8 8 8.9 7	3 3 3 3 3	55 32,37 55 56,41 56 5,89 56 30,08 57 20,44	3,091 2,859 3,743 2,071 2,854	+8,2056 ,2142 ,2622 ,3131 ,2249	8,8110 ,8163 ,8628 ,9115 ,8159	+0,4901 ,4562 ,5732 ,3162 ,4554	6,4546 +7,4156 7,9269 +8,0984 +7,4380
1326 1327 1328 1329 1330	Aquilæ Lyræ ————————————————————————————————————	8 7 7.8 8 7.8	3 4 1 2 3	57 57,18 5% 39,01 58 45,95 59 13,81 59 24,99	2,851 2,307 2,063 2,041 2,934	+8,2295 ,2930 ,3315 ,3391 ,2364	8,8158 ,8741 ,9121 ,9156 ,8114		+7,4486 +7,9985 +8,1195 +8,1332 +7,2496
1331 1332 1333 1334 1335	Antinoi Sagittarii Lyræ Vulpeculæ Draconis	8.9 8.9 7.8 7.8	3 3 1 2 2	59 30,54 59 31,89 59 41,35 19 0 18,45 0 54,74	3,195 3,737 1,602 2,594 0,596	+8,2371 ,2870 ,4154 ,2677 ,5786	8,8111 ,8605 ,9888 ,8361 9,1435	,5725 ,2047 ,4140	-7,2252 -7,9495 +8,2907 +7,8056 +8,5264
1336 1337 13 <b>38</b> 1339 1340	Aquilæ Sagittarii Lyræ	8 7.8 8 7 7.8	3 2 3 2 3	0 56,63 1 37,07 2 39,54 2 52,64 3 2,54	2,860 3,552 2,030 2,076 2,316	+8,2504 ,2786 ,3651 ,3590 ,3227	8,8138 ,8366 ,9163 ,9087 ,8710	,5505 ,3075 ,3172	+ 7,4502 7,8249 + 8,1631 + 8,1449 + 8,0256
1341 1342 1343 1344 1346	Aquilæ Sagittarii  Vulpeculæ	8.9 8.9 8 8.9 8	2 2 3 3 2	3 3,30 3 26,43 3 47,83 4 50,41 4 51,44	2,892 3,553 3,609 3,489 2,429	+8,2630 ,2910 ,2997 ,2930 ,3189	8,8112 ,8359 ,8422 ,8284 ,8543	,5506 ,5574 ,5427	+7,3956 -7,8390 -7,8886 -7,7869 +7,9679
1346 1347 1348 1349 1350	Lyræ Sagittarii Aquilæ Sagittarii Aquilæ	7.8 8 7 7.8 8	2 3 2 3	5 5 46,66 6 14,29 6 22,69 6 58,76	<b>2,</b> 338 3,536 2,899 3,414 2,864	+8,3334 ,3044 ,2840 ,2963 ,2899		,5485 ,4622 ,5333	+ 8,0275 -7,8399 +7,3997 -7,7121 +7,4866

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	nms of		zzi No.	Annual	P. M.
		van. 1, 1000.	sion.	a'	<i>b</i> ′	c'	d'	Piazzi	A. R.	Decn.
1306 1307 1308 1309 1310	5 3 4 6 4	-29 24 41,86 +43 30 47,62 +20 9 26,11 +43 30 55,04 + 2 15 55,68	+3,933 4,116 4,127 4,173 4,196	-9,0128 +9,9952 +9,8716 +9,9948 +9,6749	-8,9838 +9,1504 +8,8512 +9,1564 +7,9180	+0,5947 ,6145 ,6157 ,6204 ,6228	+9,9915 ,9904 ,9906 ,9904 ,9903	217 235 234 244 241	+,014 +,020 +,025 +,014 +,020	- ,03 - ,04 - ,11 - ,09 - ,10
1311 1312 1313 1314 1315	3 4 4 2 4	+59 11 50,16 -28 15 56,44 - 3 3 9,37 -23 27 0,43 +14 54 35,95	4,236 4,332 4,446 4,486 4,503	+0.0261 8,9031 +9,5821 +8,0000 +9,8261	+9,2589 -9,0102 -8,0720 -8,9497 +8,7622	+0,6269 ,6367 ,6480 ,6519 ,6535	+9,9901 ,9896 ,9890 ,9888 ,9887	248 246 251 253 259	-,002 +,018 +,010 +,017 +,021	- ,09 + ,06 - ,01 + ,02 - ,22
1316 1317 1318 1319 1320	4 5 3 4	+14 41 22,49 - 0 56 11,29 0 56 31,08 -25 3 7,61 +46 43 43,82	4,565 4,719 4,724 4,764 4,753	+9,8241 +9,6212 +9,6212 -8,2553 +0,0017	+8,7615 -7,5837 -7,5919 -9,0025 +9,2372	+0,6595 ,6738 ,6743 ,6780 ,6769	+9,9884 ,9876 ,9876 ,9874 ,9874	263 274 275 277 285	+,013 +,007 +,006 +,003 +,002	- ,20 - ,20 - ,10 - ,17 - ,06
1321 1322 1323 1324 1326	4 4 3 3 4	- 1 1 47,46 + 9 8 2,38 -27 31 57,53 + 37 34 39,83 + 9 24 1,60	4,826 4,860 4,877 4,900 4,979	+9,6201 +9,7649 -8,7993 +9,9708 +9,7679	-7,6307 +8,5861 -9,0508 +9,1735 +8,6082	+0,6836 ,6867 ,6882 ,6902 ,6971	+9,9870 ,9868 ,9867 ,9866 ,9862	284 288 286 296 297	+,010 +,010 +,010 +,007 +,018	- ,12 - ,10 - ,09 - ,12 - ,09
1326 1327 1328 1329 1330	3 3 2 2	+ 9 31 37,60 +30 29 26,68 +37 51 48,97 +38 29 51,92 + 5 54 47,96	5,030 5,086 5,092 5,137 5,154	+9,7694 +9,9370 +9,9717 +9,9740 +9,7259	+8,6187 +9,1099 +9,1929 +9,2029 +8,4233	+0,7015 ,7064 ,7069 ,7107 ,7121	+ 9,9859 ,9855 ,9855 ,9852 ,9851	304 309 311 317 314	,001 +,008 +,040 +,005 +,012	- ,16 - ,11 - ,12 - ,11
1331 1332 1333 1334 1335	2 2 3 4 2	- 5 35 2,78 -27 22 0,78 +48 37 19,14 +20 10 53,02 +62 27 45,16	5,161 5,171 5,171 5,227 5,266	+9,5289 -8,7708 +0,0052 +9,8692 +0,0241	8,3992 9,0740 +9,2869 +8,9541 +9,3673	+0,7131 ,7135 ,7135 ,7182 ,7216	+9,9851 ,9850 ,9850 ,9847 ,9845	313 310 319 320 6	+,009 +,011 +,004 +,024 +,008	- ,15 + ,02 - ,01 - ,25 + ,06
1336 1337 1838 1339 1340	2 4 4 2 3	+ 9 6 42,21 -20 36 30,10 +38 53 49,52 +37 39 8,65 +30 18 18,49	5,283 5,345 5,424 5,440 5,458	+9,7642 +8,8261 +9,9740 +9,9694 +9,9345	+8,6208 -8,9723 +9,2303 +9,2196 +9,1373	+0,7229 ,7280 ,7343 ,7356 ,7370	+9,9844 ,9840 ,9835 ,9834 ,9833	322 324 11 13 14	+,012 ,008 ,019	- ,06 - ,11 - ,05 - ,18 - ,13
1341 1342 1343 1344 1345	4 4 4 4	+ 7 47 50,14 -20 41 24,23 -22 50 4,56 -18 10 22,11 +26 28 13,44	5,457 5,497 5,525 5,609 5,609	+9,7497 +8,8195 +8,4150 +9,0531 +9,9117	+8,5676 8,9861 9,0292 8,9407 +9,0959	+0,7370 ,7401 ,7423 ,7489 ,7489	+9,9833 ,9830 ,9828 ,9823 ,9823	9 10 12 18 23	+,015 ,004 +,007 +,006 +,009	+ ,41 ,11 + ,02 + ,02 ,02
1346 1347 1348 1349 1350	4 4 3 3 3	+29 37 17,05 -20 3 50,20 + 7 29 19,88 -15 7 1,02 + 9 2 27,59	5,631 5,693 5,731 5,743 5,788	+9,9299 +8,8976 +9,7443 +9,2279 +9,7634	+9,1427 -8,9888 +8,5720 -8,8730 +8,6572	+ <b>0</b> ,7506 ,7553 ,7583 ,7591 ,7625	+9,9821 ,9817 ,9815 ,9814 ,9811	26 25 29 28 31	+,013 +,008 +,001 +,027	- ,12 - ,24 ,00 - ,11 + ,09

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
				Jan. 1, 1836.	sion.	a	ь	c	d
1351	Sagittarii	8.9	3	h. m. s. 19 7 30,31	\$.  +3,568	+8,3191	8,8355	÷ 0,5524	7,880
1352	Antinoi	9	2	7 42,02	3,134	,2896		,4961	
1353		7	3	7 45,86		,2982	,8129	,5214	-7,588
1354	Aquilæ	9.10	2	8 16,54		,2982	,8097		+7,494
1355		7.8	3	8 34,36	2,927	,2970	,8067	,4664	+7,338
1356	Antinoi	8	2	8 48,74	3,064		-8,8039	+0,4863	+ 5,873
1357	Sagittarii	7.8	3	8 54,89	3,506	,3210	,828()	,5448	7,832
1358	Antinoi	8	2	9 5,07		,3072	,8129	,5228	-7,615
1359	Aquilæ	10	1	9 13,43	2,864	,3039	,8091		+7,501
1360	Sagittarii	<b>7.</b> 8	2	9 35,87	4,101	,4109	,9131	,6129	-8,210
1361	Antinoi	8	3	9 54,64	3,391	+8,3112	-8,8116	+0,5213	
1362	Aquilæ	7	3	10 17,07				,4713	
1363	Sagittarii	7.8	3	10 43,41		,3490		,5620	
1364 1365	Lyræ Aquilæ	7.8 7.8	3	12 2,20 12 12,85	2,344 2,969	,3761 ,3175	,8630 ,8032		+8,070 +7,210
			ł		l	1		i .	
1366	Aquilæ	8	3	12 25,03		+8,3178		+0,4784	
1367 1368	Antinoi	8.9 7.8	2	12 36,28 12 38,13		,3212 ,3190	,8043 ,8017	,4664	+7,365
1369	Sagittarii	8	2	13 0,34	3,513	,3464			[-6,727 $[-7,865]$
1370	Antinoi	9.10	2	13 25,30	3,209	,3258	,8038	,5064	
1371	Draconis	7.8	2	13 47,56	0,352	  + 8,6980	-9,1748	+9,5465	+ 8,655
1372	Anseris	8	3	13 54,27	2,559	,3583	8,8333		+7,930
1373	Antinoi	8	2	13 57,78	3,066	,3961	8,8008		+5,488
1374		7	3	14 6,61	3,314	,3353	8,8087	0,5203	-7,615
1375	Draconis	9	1	14 32,10	0,573	,6732	9,1449	9,7581	+8,623
1376	Sagittarii	8	2	14 54,67	3,509	+8,3567		+0,5452	
1377	Aquilæ	8	2	14 59,66	2,883	,3367		,4598	+7,496
1378	Antinoi	8	3	15 25,15		,3405	,8060	,5163	
1379   1380	Sagittarii	7.8 8	3 2	16 5,62 16 35,76	3,402 3,034	,3531 ,3411	,8141 ,7992	,5317	-7,7613
	Aquilæ	0	2	•		·		,4820	+6,7638
1381	Antinoi	89	3	16 49,29	3,157	+8,3431	<b>8,8000</b>	+0,4993	-7,192
382	·	8	3	17 6,15	3,121	,3442	,7991	,4943	-6,9631
1383	Anseris	7	3	17 33,99	2,618	,3720	,8244	,4180	+7,8983
1384 1385	Cygni Aquilæ	7 8.9	2 3	18 12,65 18 51,30	2,148 3,119	,4420 ,3534	,8909 ,7979	,33 <b>2</b> 0 , <b>494</b> 0	+8,2128 $-6,963$
1	-					-			0,9032
1386	Cygni	7.8	2	19 9,43	2,489	+8,3963	8,8392	+0,3960	+8,0189
587	Auseris	7	2	19 18,18	2,621	,3810	,8231	,4185	+7,9063
388 389	Sagittarii Cygni	8 7.8	2 3	19 59,08 20 3,56	3,566	,3911	,8285	,5522	<b>-7</b> ,9581
390	Aquilæ	6.7	3	20 6,83	2,161 3,010	,4503 ,3601	,8881 ,7971	,3316 ,4786	+8,2181 +7,0196
391	Cygni	7.8	3	20 14,44	1,576	+8,5510	-8,9880		•
392	~	8	4	21 47,00	2,152	,4610	8,8887		+8,4348 +8,2323
393		8	3	22 29,48	2,132	,4241	8,8475		+8,0899
394	Draconis	7	3	22 48,47	1,091	,6448	9,0670		+8,5718
395	Cygni	8	-	23	1,587	,5612	8,9854	2006	+8,4473

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces- sion.	Logarithms of				zi No.	Annual P. M.	
				a'	Ъ′	c'	d'	Piazzi	A.R.	Decn.
1351	3 3 3 3 3	-21 21 19,05	+5,838	+8,7482	9,0255	+0,7662	+9,9807	32	*,012	- ,04
1352		-2 56 49,60	5,849	+9,5843	8,1742	,7671	,9807	34	+,017	+ ,01
1353		-11 15 20,23	5,860	+9,3802	8,7598	,7679	,9806	33	+,027	- ,05
1354		+ 9 2 40,16	5,899	+9,7627	+ 8,6655	,7708	,9803	40	+,008	- ,07
1355		+ 6 18 48,07	5,921	+9,7292	+ 8,5119	,7724	,9802	44	+,014	- ,03
1356 1357 1358 1359 1360	2 3 2 2	+ 0 12 40,90 -18 59 7,35 -11 44 5,51 + 9 3 -39 2 22,03	5,944 5,955 5,972 5,977 6,016	+9,6415 +9,0000 +9,3636 +9,7627 -9,4216	+7,0498 -8,9844 -8,7824 +8,6720 -9,2765	+0,7741 ,7749 ,7761 ,7765 ,7793	+9,9800 ,9799 ,9798 ,9798 ,9795	46 43 47 49 48	+,003 +,022 +,001 +,018 +,001	- ,17 - ,01 - ,05 - ,11
1361	3	-11 13 15,50	6,038	+9,3820	8,7679	+0,7869	+9,9793	53	+,015	- ,01
1362	3	+ 4 50 17,52	6,066	+9,7101	+8,4080	,7829	,9791	58	+,019	- ,17
1363	3	-24 30 4,94	6,111	+5,8451	9,1018	,7861	,9788	59	+,030	- ,26
1364	2	+29 39 41,07	6,211	+9,9289	+9,1857	,7931	,9781	78	-,002	- ,16
1365	3	+ 4 29 0,23	6,227	+9,7050	+8,3853	,7943	,9780	75	+,013	- ,28
1366	3 3 3 3 <b>2</b>	+ 2 38 17,51	6,244	+9,6785	+8,1584	+0,7954	+9,9778	76	+,007	- ,07
1367		+ 6 20 55,84	6,260	+9,7292	+8,5384	,7966	,9777	80	-,003	- ,08
1368		- 1 28 36,12	6,266	+9,6128	-7,9032	,7970	,9777	79	+,017	- ,09
1369		-13 19 36,08	6,269	+8,9777	-9,0168	,7993	,9774	82	+,020	+ ,04
1370		- 6 21 4,95	6,326	+9,5132	-8,5418	,8012	,9772	83	+,006	- ,26
1371 1372 13 <b>7</b> 3 1374 1375	2 2 3 3	+64 58 48,48 +21 53 + 0 4 28,05 -11 0 38,73 +63 5 52,99	6,343 6,365 6,373 6,388 6,409	+0,0183 +9,8791 +9,6385 +9,3892 +0,0174	+9,4575 +9,0735 +6,6649 -8,7840 +9,4551	+0,8023 ,8038 ,8043 ,8053 ,8068	+9,9771 ,9769 ,9769 ,9767 ,9766	98 88 87 86 101	+,015 +,014 +,012 +,013 +,019	- ,07 - ,09 - ,10 - ,01
1376	3	-19 14 18,20	6,454	+8,9912	9,0256	+0,8098	+9,9762	92	+,002	- ,01
1377	2	+ 8 17 56,74	6,459	+9,7528	+8,6676	,8102	,9762	95	+,004	- ,10
1378	1	- 9 38 58,28	6,492	+9,4314	8,7340	,8124	,9759	97	+,018	- ,24
1379	3	-14 50 29,21	6,553	+9,2480	8,9227	,8164	,9754	100	+,013	- ,13
1380	2	+ 1 31 14,14	6,591	+9,6618	+7,9397	,8190	,9751	106	+,014	+ ,06
1381	4	- 4 2 53,95	6,608	+9,5647	8,3671	+0,8201	+9,9750	109	,011	- ,16
1382	5	- 2 22 44,66	6,636	+9,5966	8,1388	,8219	,9748	111	+,014	- ,11
1383	3	+19 37 18,66	6,669	+9,8609	+9,0484	,8240	,9745	116	+,014	- ,03
1384	4	+36 7 56,60	6,718	+9,9571	+9,2960	,8272	,9741	121	,001	+ ,08
1385	3	- 2 20 39,06	6,778	+9,5977	8,1389	,8311	,9736	122	+,013	- ,09
1386	3	+24 43 49,73	6,800	+9,8965	+9,1524	+0,8325	+9,9734	127	+,007	- ,14
1387	1	+19 34 11,94	6,811	+9,8603	+9,0505	,8332	,9733	128	+,002	- ,24
1388	2	-21 40 4,21	6,877	+8,7559	-9,1024	,8374	,9728	130	+,005	- ,01
1389	3	+35 51 45,21	6,872	+9,9552	+9,3029	,8371	,9728	134	+,019	- ,10
1390	2	+ 2 36 9,55	6,882	+9,6785	+8,1952	,8377	,9727	133	+,003	- ,09
1391 1392 1393 1394 1395	3 4 3 4 2	+49 55 10,35 +36 11 58,72 +27 35 40,94 +57 41 55,92 +49 48 40,10	6,882 7,014 7,074 7,090 7,063	+9,9992 +9,9557 +9,9133 +0,0099 +9,9978	+9,4196 +9,3153 +9,2135 +9,4757 +J,4301	,8460 ,8497	+9,9727 ,9716 ,9711 ,9710 ,9712	140 149 15: 156 154	+,012 ,000 +,007 +,004	- ,26 ,00 - ,08 - ,03 - ,10

No.	Star's name and Mag.	No. Right Ascension Jan. 1, 1830		Annual Preces-		Logario	thms of	
		000.	Jan. 1, 1836.	sion.	а	b	С	d
1396 1397 1398 1399	Sagittarii 8 Albirbo seq. 7 Cygni 7.8	2 5 3 3	h. m. s. 19 24 1,95 24 8,80 24 36,73 24 50,84	+3,496 2,415 1,376 2,165	+8,4037 ,4321 ,6088 ,4746	8,8181 8,8465 9,0205 8,8848		-7,9153 +8,0985 +8,5147 +8,2428
1400	7.8	2	25 30,31	2,408	,4402	8,8466		+8,1108
1401 1402 1403 1404 1405	Anseris 8 Antinoi 8 Aquilæ 8 Cygni 7.8	2 4 3 1	25 52,61 26 47,70 26 52,84 27 10,86 27	2,982	+8,4172 ,4004 ,3941 ,6442 ,6388	8,8214 8,7995 8,7928 9,0418 9,0357	,0945	-7,6698 + 7,2341
1406 1407 1408 1409 1410	Aquilæ 7.8		27 36,81 27 37,46 27 38,36 27 47,18 28 46,70	3,070 3,136 3,304	+8,3965 ,3965 ,3975 ,4052 ,4056	8,7912 ,7912 ,7918 ,7988 ,7937	,4871 ,4964 ,5190	-5,6384 -7,1375
1411 1412 1413 1414 1415	Antinoi 8	1 3 3 3 2	28 51,22 29 8,40 29 46,99 29 58,31 30 4,70	3,086 3,078 3,086 3,068	+8,4025 ,4037 ,4065	<b>_8,7903</b>	+0,4894 ,4883 ,4894	6,5738 6,3298 6,5778
1416 1417 1418 1419 1420	Sagittarii 7.8	2 2 2 2 2 2	30 5,05 30 30,22 30 30,85 30 39,02 30 39,41	3,539 3,608 2,937	+8,6074 ,4397 ,4483 ,4128 ,4142	8,9895 ,8186 ,8272 ,7913 ,7923	,5489 ,5573	<b>—7,</b> 9924
1421 1422 1423 1424 1425	Aquilæ 7.8 Antinoi 9 ————————————————————————————————————	1 2	30 51,67 30 53,80 31 12,05 31 37,33 31 42,41	3,107 3,248 —0,170	,4118 ,4180 ,8633	8,7889 8,7930 9,2376	+0,4481 +0,4923 +0,5116 -9,2304 +0,4634	-6,9169 -7,5792 +8,8340
1426 1427 1428 1429 1430	Sagittarii 7.8	4 2 3 1 3	32 1,29 32 44,40 32 60,89 33 38,64 34 5,55	3,896 2,680 2,678	+8,4201 ,5017 ,4409 ,4446 ,4471	8,7912 ,8686 ,8078 ,8073 ,8074		<b>—8,2495</b>
1431 1432 1433 1434 1435		3 3	34 9,09 34 18,09 34 27,52 34 50,35 35	2,331	+8,4342 ,4934 ,4286 ,4332 ,4416	8,7942 ,8531 ,7872 ,7897 ,7937		+8,2057 +7,3296
1436 1437 1438 1439 1 <b>44</b> 0	Aquilæ 8.9	4	35 18,86 35 28,19 36 17,69 36 25,08 36 46,72	2,680 2,914 2,809	,4454	-8,8069 ,8047 ,7877 ,7937 ,7885	+0,4265 ,4281 ,4645 ,4486 ,4606	+7,9332 +7,5377

	<del></del>							<del></del> -		
No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	ms of		zzi No.	Annu	al P. M.
			sion.	a'	<b>b</b> '	c'	d'	Piazzi	A. R.	Decn.
1396 1397 1398 1399 1400	4 4 4 3 3	-18 57 33,53 +27 37 32,23 +53 38 0,16 +35 53 16,07 +27 55 18,17	+7,205 7,205 7,243 7,264 7,319	+9,0334 +9,9127 +0,0030 +9,9533 +9,9133	+9,2220 +9,4638 +9,3274	,8576 ,8599 ,8612	,9700 ,9696 ,9694	155 162 167 164 169	* +,026 +,012 +,022 +,010 +,009	-,11 -,03 -,02 +,02 -,02
1401 1402 1403 1404 1405	3 3 2 1	+20 39 23,98 -10 43 10,79 + 3 57 32,84 +55 47 25,36 +55 14 27,35	7,351 7,427 7,433 7,449 7,460	+9,8645 +9,4048 +9,6964 +0,0052 +0,0043	+9,1121 8,8383 +8,4091 +9,4877 +9,4854	,8711	,9679 ,9679 ,9677	172 177 178 189 190	+,005 +,012 +,011 +,013	- ,08 - ,01 - ,15 - ,01 - ,24
1406 1407 1408 1409 1410	2 2 3 2 2	- 0 14 54,50 - 0 6 26,83 - 3 9 45,02 -10 47 20,89 + 7 11 31,52	7,49 <b>2</b> 7,492 7,498 7,508 7,590	+9,6345 +9,6345 +9,5832 +9,4031 +9,7380	-7,1825 -6,8145 -8,3129 -8,8456 +8,6763		+9,9673 ,9673 ,9673 ,9672 ,9664	182 183 181 185 195	+,019 +,011 +,016 -,010 +,006	- ,39 - ,18 - ,12 - ,37 + ,03
1411 1412 1413 1414 1415	4 3 3 1	- 0 51 9,96 - 0 29 32,64 - 0 51 11,69 - 0 1 17,05 + 34 51 6,91	7,595 7,616 7,665 7,681 7,686	+9,6243 +9,6304 +9,6232 +9,6375 +9,9464	7,7498 7,5059 7,7538 6,0472 +9,3407	+ 0,8805 ,8817 ,8845 ,8854 ,8857	+9,9663 ,9661 ,9657 ,9655 ,9655	194 198 200 202 207	+,005 +,003 +,015 +,015 +,008	- ,04 - ,08 - ,04 - ,16 - ,12
1416 1417 1418 1419 1420	2 2 2 1	+50 53 16,12 -20 55 0,42 -23 41 57,00 + 6 3 + 7 14 56,41	7,681 7,730 7,730 7,735 7,740	+9,9961 +8,8808 +8,4150 +9,7234 +9,7372	+9,4732 -9,1389 -9,1903 +8,6105 +8,6878	+0,8854 ,8881 ,8881 ,8884 ,8887	+9,9655 ,9650 ,9650 ,9650 ,9649	211 205 204 208 209	+,017 +,007 +,003 +,016 +,008	- ,14 - ,15 + ,02 - ,01
1421 1422 1423 1424 1425	2 1 2 2 2 2	+11 59 31,18 - 1 50 9,34 - 8 20 25,29 +69 10 17,53 + 7 28 21,95	7,751 7,756 7,789 7,800 7,821	+9,7896 +9,6074 +9,4698 +0,0065 +9,7404	+8,9053 -8,0927 -8,7506 +9,5609 +8,7050	+0,8894 ,8897 ,8915 ,8921 ,8932	+9,9648 ,9648 ,9644 ,9643 ,9641	212 210 213 227 216	+,020 +,014 +,012 -,015 +,011	- ,05 - ,10 - ,17 - ,09 - ,01
1426 1427 1428 1429 1430	3 2 3 3	+ 7 11 44,72 -34 1 28,60 +17 31 29,96 +17 37 4,56 +17 48 56,65	7,848 7,912 7,912 7,976 8,013	+9,7372 -9,1875 +9,8395 +9,8395 +9,8414	+ 8,6908 9,3441 +9,0752 +9,0808 +9,0875	+0,8947 ,8983 ,8983 ,9018 ,9038	+9,9639 ,9632 ,9632 ,9626 ,9622	217 218 225 228 234	+,008 +,017 +,010 +,004 +,011	- ,05 - ,06 - ,17 - ,07 - ,20
1431 1432 1433 1434 1435	4 3 2 4 3	-11 3 14,51 +31 1 48,76 + 4 34 21,08 + 7 59 55,34 -11 34 44,47	8,019 8,024 8,037 8,072 8,141	+9,3979 +9,9268 +9,7041 +9,7458 +9,2838	-8,8847 +9,3147 +8,5043 +8,7486 -8,9109	+0,9041 ,9044 ,9051 ,9070 ,9107	+9,9621 ,9621 ,9619 ,9616 ,9608	231 239 235 241 245	+,025 +,013 +,016 +,009	- ,19 + ,03 - ,09 - ,09 - ,03
1436 1437 1438 1439 1440	3 2 2 3 3	+18 0 16,91 +17 35 10,47 + 7 12 3,26 +11 59 14,10 + 8 20 20,71	8,110 8,126 8,190 8,200 8,227	+9,8426 +9,8395 +9,7372 +9,7882 +9,7490	+9,0974 +9,0884 +8,7103 +8,9297 +8,7753	+0,9090 ,9099 ,9133 ,9138 ,9152	+9,9612 ,9610 ,9603 ,9602 ,9599	246 247 248 250 252	+,017 +,004 +,007 +,004 +,019	- ,05 - ,05 - ,03 + ,06 - ,10

No.	Star's name and Mag.		tar's name and Mag.		ar's name and Mag. No.		Ann Prec	n.				
				Jan 1, 1836	. sio	n.	a	<b>b</b>	c	d		
		_		h. m. s.				0.7011				
1441	Aquilæ	7	2	19 36 54,9	1  + 2,		+8,4451	<b>-8,7911</b>	+0,4536	+7,7071		
1442	16 c Cygni seq.	7	2	37 29,9	1,	610	,6333	,9766	,2068	+8,5185		
1443		7	3	37 58,9		121	,5450	,8859	,3265	+8,3337		
1444	Aquilæ	7.8	3 2	38 46,4		852	,4524	,7889	,4551	+7,6948		
1445	Sagittæ	9	2	38 47,5	9 2,	682	,4662	,8030	,4285	+7,9477		
1446	Sagittarii	7.8	3	39 18,6	6 4.	169	+8,5786	-8,9122	+0,6200	-8,4062		
1447	Cygni seq.	7.8	3	39 39,6		198	,5392	8,8718		+8,3052		
1448	Aquilæ	7	3	39 41,2		953	,4512	8,7852	,4703			
1449	Sagittæ	7.8	2	39 43,7		654	,4731	8,8071		+7,9809		
1450	Cygni	7.8	2	40 18,4		<b>22</b> 9	,7110	9,0407	,0895	+8,6329		
	2	~ ^	ا ہا	41,00	ء أي		. 0 4005	0.0000	. 0 4004	. 0 0100		
1451	Sagittæ	7.8	2	41 22,5		633	+8,4825	-8,8063		+8,0128		
1452	Antinoi	7.8	3	41 28,5	3,	014	,4570	8,7801	,4791	+7,1053		
1453 1454	Cygni	7.8 7.8	3 2	41 25,0 42 <b>2</b> ,8	00 1,	313 498	,7023 ,4849	9,0264	,1183	+8,6181 8,0109		
1455	Sagittarii Cygni	7.8	3	42 <b>2</b> ,8 43 25,9	6 9	291	,5398	8,8051 8,8538	,5438 ,3600	+8,2745		
1300	l Oygur	7.0	"	10 20,0	~ ~	231	,0000	0,0000	,0000	, 0,5, 10		
1456	Vulpeculæ	7	2	43 39,4	15 2.	639	+8,4910	8,8038	+0,4214	+8,0173		
1457	Aquilæ	8	3	44 26,		858	,4749	,7838	,4561			
1458	Sagittæ	8	2	44 37,		692	,4893	,7972	,4301	+7,9658		
1459		7.8	2	45 20,	55 2,	67l	,4943	,7988	,4267	+7,9920		
1460		7.8	5	45 35,	04 2,	693	,4928	,7963	,4302	+7,9685		
1401	57 A - 11 3 - 1 - 1	~		45 45		050	. 0 4704	0 7000	0 5110	7 6556		
1461 1462	57 Aquilæ seq.	7 8	3	45 45,	42 0	250 831	+8,4784	8,7808 ,7839	+0,5119	7,6556 7,7706		
1463			2	45 57, 46 11,	21 2	635	,4823 ,5017	,8021		+ 7,7706 (+ 8,0340		
1464		7.8	3	47 27,		825	,4884	,7830	,4510	+7,7901		
1465		7	2	47 33,		540	,5189	,8130	,4048	+8,1265		
			~				,====	,5				
1466		8.9	3	48 39,		694	+8,5044	-8,7935		+7,9818		
1467		8	3			652	,5146	,7969	,4236	+8,0352		
1468		8	2	50 10,		,838		,7795	,4530	+7,7777		
1469		8.9	4	50 10,		,834		,7797	,4524	+7,7851		
1470	Sagittæ	8	3	50 18,	74 2	,713	,5090	,7901	,4334	+7,9678		
1471	Aquilæ	7.8	3	50 34,	69 2	913	+8,4949	_8,7748	+ 0,4643	+7,6097		
1472		9	3	50 45,		,529	,5226	,8015	,5476			
1473		8	3	50 51,		940		,7733		+7,5258		
1474	_ · · · · · · · · · · · · · · · · · · ·	8	3			571			,5528	-8,1224		
1475		9	3			835	,5014	,7793	,4525	+7,7871		
		_										
1476		8	2	52 13,		,926		<b>-8,7725</b>				
1477		8	3	52 52,		,912		,7725	,4642	+7,6216		
1478		8.9	3	52 55,		,924			,4660	+7,5866		
1479 1480		7.8 8	3	53 8, 53 14,		,997 ,593						
1 200	, arpecuias	3	*	00 14,	2	ესშა	,000,	,0012	,4100	70,1009		
1481	Sagittarii	8 8	3	53 45,	74 3	,465	+8,5261	-8,7913	+0,5397	_8,0317		
1482	2 Antinoi	8	3	55 2		,075						
1483		8	3			,421	,5296	,7844	,5341	<b>-7,9910</b>		
1484		8	! 3	56 26	54 3	,400	<b>,528</b> 6	,7819	,5315	-7,9654		
1485	Sagittæ	6.7	3	56 32	78 2	,718				+7,9887		

No.	No.	Declination	Annual Preces-		Logarit	hms of		zi No.	Annua	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	ď	Piazzi	A. R.	Decn.
1441 1442 1443 1444 1445	3 4 3 2	+10 31 22,87 +50 8 +37 55 57,69 +10 3 49,03 +17 37 48,45	# 8,237 8,280 8,317 8,386 8,386	+9,7738 +9,9899 +9,9547 +9,7671 +9,8376	+8,8758 +9,5013 +9,4067 +8,8641 +9,1029	,9180 ,9200	,9594 ,9590	253   262   263   268   270	+,003 +,005	+ ,13 - ,04 - ,22 - ,08
1446 1447 1448 1449 1450	3 2 3 3 3	-42 15 44,75 +35 41 33,04 + 5 22 55,40 +18 47 0,37 +56 38 55,38	8,434 8,449 8,460 8,460 8,497	-9,4609 +9,9455 +9,7143 +9,8482 +9,9978	-9,4517 +9,3909 +8,5977 +9,1332 +9,5492	+0,9260 ,9268 ,9274 ,9274 ,9293	+9,9577 ,9575 ,9594 ,9594 ,9570	266 277 272 274 284	,003 +,008 ,000 +,039 +,024	+ ,01 - ,13 - ,14 - ,04 - ,03
1451 1452 1453 1454 1455	3 3 2 4 2	+19 48 36,97 + 2 32 53,05 +55 26 56,96 -19 37 21,44 +32 52 1,52	8,592 8,602 8,587 8,650 8,750	+9,8537 +9,6758 +9,9956 +9,0263 +9,9304	+9,1623 +8,2809 +9,5477 -9,1610 +9,3748	+0,9341 ,9346 ,9338 ,9370 ,9420	,9560 ,9552	287 285 292 288 300	+,023 +,007 +,025 +,006 +,036	- ,17 ,00 - ,15 - ,13 - ,16
1456 1457 1458 1459 1460	3 4 1 3 7	+19 37 34,43 + 9 56 5,37 +17 25 32,54 +18 19 23,30 +17 23 50,95	8,771 8,839 8,850 8,907 8,922	+9,8519 +9,7649 +9,8344 +9,8414 +9,8338	+9,1674 +8,8819 +9,1215 +9,1454 +9,1242	,9464 ,9469	+9,9538 ,9530 ,9529 ,9522 ,9520	301 307 308 312 315	+,020 ,004 +,018 +,015 +,019	- ,11 - ,19 - ,10 + ,02 + ,02
1461 1462 1463 1464 1465	2 3 2 4 4	- 8 39 25,63 +11 11 19,15 +19 54 16,05 +11 31 58,47 +23 53 40,00	8,943 8,954 8,975 9,073 9,082	+9,4683 +9,7781 +9,8531 +9,7810 +9,8797	8,8268 +8,9384 +9,1833 +8,9573 +9,2637	+0,9515 ,9520 ,9530 ,9578 ,9580	+ 9,9520 ,9517 ,9514 ,9502 ,9501	314 317 321 326 327	-,013 +,017 -,001 +,005 +,012	- ,04 - ,03 - ,17 - ,10 - ,03
1466 1467 1468 1469 1470	4 3 4 5 3	+17 27 26,66 +19 21 47,35 +10 58 45,28 +11 9 22,42 +16 42 40,76	9,162 9,276 9,286 9,286 9,296	+9,8331 +9,8470 +9,7745 +9,7767 +9,8267	+9,1373 +9,1860 +8,9458 +8,9529 +9,1252	+0,9620 ,9673 ,9678 ,9678 ,9693	+9,9491 ,9477 ,9475 ,9475 ,9474	335 338 336 337 341	+,015 +,004 +,002 +,005 +,010	- ,06 - ,08 + ,02 + ,13 - ,04
1471 1472 1473 1474 1475	3 3 3 2	+ 7 28 56,96 -21 17 50,78 + 6 9 10,88 -23 4 41,18 +11 7 34,62	9,317 9,333 9,338 9,358 9,358	+9,7364 +8,9191 +9,7210 +8,7243 +9,7760	+8,7820 -9,2279 +8,6994 -9,2623 +8,9550	+0,9693 ,9700 ,9702 ,9712 ,9712	+9,9471 ,9469 ,9469 ,9466 ,9471	345 339 348 346 350	+,012 +,006 +,006 +,006 +,005	+ ,01 + ,04 - ,05 - ,03 + ,07
1476 1477 1478 1479 1480	3 4 3 2 4	+ 6 50 41,90 + 7 32 9,75 + 6 57 58,95 -38 18 36,97 +21 59 44,22	9,441 9,492 9,497 9,518 9,518	+9,7292 +9,7372 +9,7308 -9,3096 +9,8645	+8,7496 +8,7940 +8,7594 —9,4688 +9,2501	+0,9750 ,9774 ,9776 ,9785 ,9785	+9,9455 ,9448 ,9448 ,9445 ,9445	357 363 364 359 368	+,010 +,005 +,011 -,009 +,002	+ ,01 - ,04 + ,02 - ,38 + ,07
1481 1482 1483 1484 1485	4 4 4 5 2	-18 41 33,91 - 0 21 51,99 -16 49 53,26 -15 53 0,90 +16 39 48,37	9,564 9,656 9,743 9,768 9,773	+9,1139 +9,6314 +9,2095 +9,2504 +9,8241	-9,1843 -7,4890 -9,1481 -9,1246 +9,1461	+0,9806 ,9848 ,9887 ,9898 ,9900	+9,9439 ,9427 ,9415 ,9411 ,9410	367 376 381 387 392	+,005 +,018 +,010 +,006 +,011	+ ,07 - ,13 - ,07 - ,04 - ,20

No.	Star's name and	Mag.	No. Obs.		ght ension	Annual Preces-		Logarit	thms of	
			Obs.	Jan. 1	, 1836.	sion.	а	ь	с	d
1486 1487 1488 1489 1490	Antinoi Sagittarii Sagittæ Sagittarii Capricorni	9 7.8 7 8	2 3 2 3 2	19 50 50 50 50	5. 5. 5 33,87 5 42,11 6 50,03 6 55,35 7 37,78	3,542	+ 8,5153 ,5393 ,5329 ,5463 ,5278	,7916 ,7847 ,7978	,5492	-7,6032 -8,0719 +8,0058 -8,1221 -7,8922
1491 1492 1493 1494 1495	Capricorni Antinoi Vulpeculæ Antinoi Sagittæ	7.8 8 7.8 8 7.8	2 2 1 2 2 2	5 5 5 5 5	3 1,66 8 6,43 8 40,46	3,260 2,570 3,095	,5230 ,5538	,7691 ,7999		7,8759 7,7345 +8,1492 6,8860 +7,9906
1496 1497 1498 1499 1500	Antinoi Vulpeculæ Sagittæ —— Vulpeculæ	8 8 8 7.8 8.9	3 2 3 3 3		9 27,08 0 1,52 0 1,77 1 4,91 1 28,43	2,633 2,724 2,654	,5417 ,5533	-8,7621 ,7900 ,7797 ,7864 ,7900	,4204	+8,0993
1501 1502 1503 1504 1505	Aquilæ Antinoi Vulpeculæ Antinoi	7 8.9 7 7 7	2 3 2 2 2		1 39,96 1 45,32 1 50,65 2 16,26 3 21,54	3,202 2,511 3,256	,5321 ,5750 ,5366	,7622 ,8049		+8,2140
1506 1507 1508 1509 1510	Antinoi ——— seq. Aquilæ	7 8 7 7.8 7.8	3 2 2		2 2 51,22 2 53,68 3 5,79		,5357 ,5328 ,5357	8,7609 8,7580 8,7601	0,4884 <b>0</b> ,4698	-7,5972 -6,5406
1511 1512 1513 1514 1515	Antinoi Aquilæ Capricorni	8 8 7 7.8 8	3 3 2 3 2		3 22,14 3 25,17 3 39,99 3 44,69 4 5,30	3,074 2,746 3,297	,5345 ,5516	,7574 ,7737 ,7655	,4387	
1516 1517 1518 1519 1520	Vulpeculæ Aquilæ	8 7.8 8 8 7.8	3 2 2 2 2		4 47,67 5 5 15,47 5 20,03 5 48,65	2,505 2,971 2,749	,5417	,8029 ,7569 ,7717	,4729 ,4392	+ 8,2328 + 7,4673 + 7,9867
1521 1522 1523 1524 1525	Aquilæ pr.	8 7.8 7.8 7	3 2 2 3 1		5 55,64 6 7,26 6 7,91 6 39,53 6 44,12	2,946 2,946 3,010	,5455 ,5455 ,5452	,7568 ,7568 ,7542	,4692 ,4692 ,4786	+7,5719 +7,5731
1526 1527 1528 1529 1530	Aquilæ Cygni	8.9 7.8 8 7 7.8	2 2 2 3 1		7 10,23 7 16,69 7 56,36 8 29,28 8 31,77	3,022 2,241 1,887	,5469 ,6408	,7533 ,8450 ,9117	,4803 ,3504	+7,1597

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarit	hms of		zi No.	Annual	P. M.
	000.	Jan. 1, 1000.	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
1486 1487 1488 1489 1490	3 4 3 3 3	- 7 2 40,21 - 19 57 8,28 + 17 16 38,05 - 22 8 6,82 - 13 23 24,84	+9,773 9,783 9,793 9,799 9,860	+9,5105 +9,0414 +9,8280 +8,8692 +9,3424	8,7760 9,2212 +9,1619 9,2650 9,0564	,9905 ,9909 ,9912	,9409 ,9408	389 388 394 390 396	5. +,019 +,001 +,012 +,001 +,007	
1491 1492 1493 1494 1495	3 3 3 4	-12 54 11,62 - 9 22 44,50 +23 12 19,64 - 1 20 14,72 +16 24 9,01	9,865 9,890 9,890 9,936 9,986	+9,3598 +9,4579 +9,8704 +9,6170 +9,8202	9,0409 8,9048 +-9,2887 8,0620 +-9,1486	,9952 ,995 <b>2</b> ,9972	+9,9398 ,9394 ,9394 ,9388 ,9380	398 399 401 403 409	+,011 +,017 +,005 +,031 +,019	+ ,03 ,06 + ,04 ,15 ,06
1496 1497 1498 1499 1500	3 1 3 3 2	+ 1 58 29,30 +20 38 4,46 +16 33 8,61 +19 44 46,00 +21 8 65,77	9,991 10,037 10,032 10,117 10,142	+9,6665 +9,8519 +9,8214 +9,8451 +9,8555	+8,2332 +9,2466 +9,1540 +9,2319 +9,2615	+0,9996 1,0016 1,0014 1,0051 1,0061	+9,9380 ,9373 ,9374 ,9361 ,9358	407 415 413 422 424	+,018 +,013 +,009 +,011 +,018	+ 05 - ,06 + ,05 - ,17 + ,07
1501 1502 1503 1504 1505	3 4 2 3 2	+ 16 26 6,73 - 6 38 25,26 + 25 48 2,91 - 9 19 19,19 - 6 34 2,75	10,158 10,167 10,172 10,208 10,218	+9,8195 +9,5211 +9,8842 +9,4609 +9,5224	+9,1564 8,7679 +9,3444 8,9154 8,7646	+1,0068 ,0072 ,0074 ,0089 ,0094	+9,9355 ,9354 ,9353 ,9348 ,9346	2 425 5 4 6	-,005 +,017 +,007 +,009 +,006	- ,03 - ,05 + ,01 - ,08 - ,10
1506 1507 1508 1509 1510	2 1 2 3	+20 31 28,55 - 6 37 49,28 - 0 36 25,61 + 5 52 3,10 +63 13	10,238 10,253 10,253 10,268 10,278	+9,8500 +9,5211 +9,6284 +9,7160 +9,9827	+9,2533 -8,7704 -7,7167 +8,7203 +9,6607	+1,0102 ,0108 ,0108 ,0115 ,0119	+9,9343 ,9341 ,9341 ,9339 ,9337	15 8 12 17 30	+,017 +,017 +,016	- ,09 - ,03 - ,19 - ,03
1511 1512 1513 1514 1516	2 3 1 2 1	+ 5 35 26,16 - 0 18 14,75 +15 41 16,21 -11 19 28,90 +20 52 10,14	10,288 10,293 10,308 10,318 10,338	+9,7126 +9,6335 +9,8129 +9,4116 +9,8513	+8,6997 -7,4047 +9,1437 -9,0038 +9,2645	+1,0123 ,0125 ,0132 ,0136 ,0144	+9,9336 ,9335 ,9333 ,9331 ,9328	19 18 23 20 27	+,014 +,016 +,016 +,011 +,015	- ,15 - ,14 + ,16 - ,08 + ,01
1516 1517 1518 1519 1520	3 2 3 3	+15 43 54,14 +26 15 33,25 + 4 49 13,70 +15 36 -12 7 41,41	10,393 10,413 10,428 10,434 10,472	+9,81 <b>2</b> 9 +9,8848 +9,7024 +9,×116 +9,3892	+9,1480 +9,3616 +8,6418 +9,1465 -9,0401	+1,0167 ,0176 ,0182 ,0184 ,0200	+9,9320 ,9317 ,9315 ,9314 ,9308	32 36 35 38 39	+,020 +,015 +,022 +,014	- ,04 + ,03 - ,18 - ,12
1521 1522 1523 1524 1525	3 3 3 2	- 0 20 52,45 + 6 5 21,58 + 6 6 3,66 + 2 54 46,56 -16 47 18,82	10,482 10,498 10,498 10,537 10,543	+9,6325 +9,7177 +9,7177 +9,6776 +9,2279	-7,4832 +8,7455 +8,7467 +8,4273 -9,1815	+1,0205 ,0211 ,0211 ,0227 ,0229	+9,9306 ,9304 ,9304 ,9297 ,9297	41 43 44 46 45	+,017 -,010 -,013 +,005 +,016	- ,10 - ,03 - ,08 - ,12 - ,12
1526 1527 1528 1529 1530	3 3 1 4 4	- 3 3 33,77 + 2 21 6,39 +36 6 40,82 +46 13 4,67 +36 15 24,12	10,572 10,682 10,621 10,666 10,671	+9,5888 +9,6712 +9,9299 +9,9595 +9,9299	-8,4481 +8,3354 +9,4946 +9,5846 +9,4980	+ 1,0241 ,0246 ,0262 ,0280 ,0282	+9,9292 ,9290 ,9284 ,9277 ,9276	50 51 55 63 61	-,006 +,012 +,016 +,014 +,005	+ ,03 ,00 - ,02 ,00 + ,06

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-				·
				Jan. 1, 1836.	sion.	a	b	c	d
1531	Aquilæ	7.8	3	h. m. s. 20 9 37,15	s. +2,758	+8,5694	<b>-8,7660</b>	+0,4406	+7,9931
1532	Capricorni	7.8	3	9 51,11	3,365	,5689	8,7645	,5270	-7,9758
1533	Vulpeculæ	7.8	3	9 56,45	2,634	,5846	8,7799	,4206	+8,1406
1534	Draconis	6.7	2	10 26,47	1,107	,8587		,0441	+8,7969
1535	Capricorni	8.9	3	10 41,70	3,364	,5715		,5269	<b>-7,9778</b>
1536	Capricorni	8	2	11 36,27	3,450	+8,5835	_8,7715	+0,5378	<u>8,<b>0</b>921</u>
1537	Vulpeculæ	7.8	2	11 40,34	2,605	,5939		,4158	+8,1758
1538	Antinoi	7.8	4	11 41,96	3,203	,5629	,7507	,5056	<b>-7,6395</b>
1539	$\mathbf{v}_{\mathbf{ulpecul}}$	7.8	2	12 19,85		,5963	7811	,4158	+8,1792
1540	Antinoi	7.8	3	12 23,88	3,202	,5649	,7499	,5054	<b>—7,6414</b>
1541	Capricorni	7.8	3	12 28,83	3,530	+8,5962	-8,7809	+0,5478	-8,1781
1542	<del></del>	8	2	13 5,80	3,395	,5818	8,7637	,5308	<u> 8,0308</u>
1543	Antinoi	8.9	2	13 8,59	3,206	,5672	8,7492	,5060	<b>-7,6572</b>
1544	Cephei	8	2	13 14,18	1,387	,8208	9,0031	,1421	+8,7415
1545	Capricorni	8	3	13 31,50	3,323	,5761	8,7564	,5215	<b>7,9249</b>
1546	Capricorni	8	2	13 42,14	3,251	+8,5712	8,7510	+0,5120	-7,7812
1547		8	2	13 43,51	3,448	,5895	,7690	,5376	-8,0989
1548	Vulpeculæ	8	2	13 47,89	2,640	,5955	,7750	,4216	+8,1502
1549	Capricorni	8	1	13 56,27	3,393	,5840		,5306	-8,0317
1550	Antinoi	9	4	14 16,94	3,188	,5696	,7469	,5035	<b>7,6007</b>
1651	Vulpeculæ	9	2	14 36,55	2,644	+8,5974	-8,7736	+9,4223	+8,1498
1552	Capricorni	8	1	14 36,94	3,562	,6073		0,5517	<b>—8,2163</b>
1553	Delphini	8	2	15 34,57	2,876	,5772	,7493	0,4588	+7,8103
1554	Vulpeculæ	8	3	15 36,21	2,585	,6085	,7806	0,4125	+8,2104
1555		7.8	2	16 7,12	2,586	,6099	,7798	9,4126	+8,2112
1556	Antinoi	8	3	16 12,01	3,108	+8,5727	8,7423		<b>—7,1262</b>
1557	37 1 . 1	7	3	16 16,04	3,057	,5726	,7420		+6,5548
1558	Vulpeculæ	7	2	16 18,82	2,595	,6092	,7783	,4141	+8,2038
1559	Antinoi	7.8	2	16 21,21	3,052	,5730	,7418	,4846	+6,7443
1560	Delphini	9	1	16 23,93	2,859	,5808	,7493	,4562	+7,8502
1561	Antinoi	9	1	16 35,61	3,144	+8,5747	-8,7425	+0,4975	-7,4110
1562	Capricorni	7.8	1	16 55,11	3,463	,6007	,7671	,5394	-8,1278
1563	37 1 1	7.8	1	17 7,98	3,351	,5890	,7546	,5251	<b>-7,9837</b>
1564 15 <b>6</b> 5	Vulpeculæ Antinoi	7.8 7.8	3	17 21,68 17 25,08	2,582	,6140	,7791	,4120 ,4986	+8,2194 -7,4605
ſ				•	3,152	,5772	,7417	,4960	7,4005
1566	Antinoi	8.9	4	17 27,00	3,144	+8,5771	8,7414	+0,4972	<b>—7,4153</b> i
1567	Capricorni	7.8	1	17 34,91	3,470	,6037	,7674		<b>8,1391</b>
1568	Antinoi	7	1	17 59,46	3,022	,5780	,7400	,4803	+7,2059
1569	Vulpeculæ	8	2	18 7,37	2,603	,6135	,7753 {		+8,2042
1570	Antinoi	7	2	18 21,97	3,041	,5788	,7392	,4830	+6,9668
1571	Draconis	7	1	18 51,55	1,921	+8,9213		+0,2835	
1572	Vulpeculæ	8	1	18 51,68	2,600	,6160	8,7748		+8,2094
1573	Antinoi	8	2	18 54,99	3,143	,5812	8,7394		<b>-7,41</b> 56
1574 1575	•	8	2	18 56,28	3,119	,5806	8,7389	,4940	<b>—7,2428</b>
1676		7.8	3	18 57,95	3,118	,5808	8,7388	,4939	_7,2403

No.	No.	Declination	Annual Preces-	•	Logarit	hms of	_	zi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	d'	Piazzi	A.R.	Decn.
1531 1532 1533 1534 1535	3 3	+15 22 14,68 -14 47 51,73 +21 3 55,83 +60 8 22,08 -14 47 0,13	10,754 10,774 10,779 10,809 10,838	+9,8075 +9,3117 +9,8500 +9,9759 +9,3139	-9,1372 +9,2866	,0324	,9259 ,9259 ,9254	68 66 72 82 73	+,011 +,013 +,030	- ,12   - ,14   + ,07   - ,11   - ,13
1536 1537 1538 1539 1540	2 3 3	-18 50 3,30 +22 25 56,79 - 6 52 5,93 +22 29 14,82 - 6 51 51,27	10,907 10,907 10,912 10,965 10,960	+9,1461 +9,8579 +9,5198 +9,8579 +9,5198	-9,2443 +9,3176 -8,8124 +9,3209 -8,8144	+1,0377 ,0377 ,0379 ,0400 ,0398	,9237 ,9237	80 86 84 91 90	+,011 ,007 +,003 +,007 +,010	- ,04 + ,06 - ,15 + ,04 - ,14
1541 1542 1543 1544 1545	3 2 2 3 3	-22 28 15,35 -16 20 36,61 - 7 4 52,56 +56 23 58,48 -12 53 54,47	10,965 11,014 11,014 11,013 11,043	+8,9085 +9,2577 +9,5159 +9,9713 +9,3747	9,3200 9,1890 8,8300 +9,6605 9,0899	+1,0400 ,0419 ,0419 ,0417 ,0431	+9,9228 ,9219 ,9219 ,9220 ,9214	88 94 95 104 96	+,020 +,013 +,003 +,010 ,000	- ,05 + ,23 - ,06 - ,32 + ,07
1546 1547 1548 1549 1550	1 3 2 2 1	- 9 20 33,83 -18 51 31,47 +21 0 14,47 -16 18 30,26 - 6 11 41,60	11,052 11,058 11,058 11,073 11,098	+9,4669 +9,1523 +9,8476 +9,2601 +9,5327	-8,9515 -9,2510 +9,2964 -9,1900 -8,7743	+1,0435 ,0437 ,0437 ,0442 ,0452	+9,9213 ,9212 ,9212 ,9209 ,9205	98 97 101 100 103	+,021 +,017 +,018 +,010 +,015	- ,04 ,00 + ,02 - ,09 - ,02
1551 1552 1553 1554 1555	2 2 3 2 2	+20 53 4,46 -23 59 48,90 + 9 50 21,98 +23 33 28,95 +23 30 54,03	11,116 11,121 11,189 11,189 11,227	+9,8463 +8,7634 +9,7559 +9,8633 +9,8627	+9,2963 -9,3532 +8,9800 +9,3487 +9,3496	+1,0459 ,0461 ,0488 ,0488 ,0503	+9,9202 ,9201 ,9189 ,9189 ,9182	106 105 110 113 118	+,012 +,027 +,007 +,002 +,001	- ,07 - ,04 - ,16 - ,04 - ,04
1556 1557 1558 1559 1560	2 2 1 2 2	- 2 4 1,57 + 0 32 32,57 +23 8 48,33 + 0 50 38,75 +10 41 54,31	11,233 11,237 11,242 11,247 11,252	+9,6064 +9,6454 +9,8597 +9,6493 +9,7634	-8,3020 +7,7309 +9,3434 +7,9203 +9,0186	+1,0505 ,0506 ,0508 ,0510 ,0512	+9,9181 ,9181 ,9180 ,9179 ,9178	115 116 122 117 120	+,014	- ,08 - ,16 - ,08 - ,06 - ,23
1561 1562 1563 1564 1565	2 2 1 2 1	- 3 56 57,96 -19 40 54,15 -14 23 33,61 +23 45 3,22 - 4 23 39,02	11,266 11,291 11,304 11,314 11,323	+9,8633	8,5861 9,2778 9,1459 +9,3570 8,6353	+ 1,0518 ,0527 ,0532 ,0536 ,0540	+9,9175 ,9171 ,9169 ,9167 ,9165	125 130	+,008 +,014	- ,14 - ,07 - ,09 + ,01 - ,06
1566 1567 1568 1569 1570	2 2 2 2 3	- 3 58 24,96 -20 4 41,66 + 2 25 37,32 +22 54 56,65 + 1 23 7,57	11,328 11,338 11,368 11,372 11,397		-8,5903 -9,2880 +8,3816 +9,3445 +8,1427	+1,0542 -,0545 ,0556 ,0558 ,0567	+ 9,9164 ,9162 ,9157 ,9156 ,9162	127 134 137	+,012 +,006 +,011	,11 ,17 ,03 ,07 ,01
1571 1572 1573 1574 1575	2 3 2 3	+62 54 +23 4 13,79 - 3 55 44,97 - 2 39 0,84 - 2 38 0,18	11,420 11,424 11,434 11,434 11,438	+9,5966	+9,7052 +9,3492 -8,5907 -8,4185 -8,4159	+ 1,0577 ,0578 ,0582 ,0582 ,0584	+9,9148 ,9147 ,9145 ,9145 ,9144	138 139	,000 +,004 +,019 -,010 +,012	- ,05 - ,06 - ,16 - ,06

No.	Star's name and	and Mag.		Right Ascension	Annual Preces-		Logarit	hms of	
			Obs.	Jan. 1, 1836.	sion.	а	ь	c	d
1576 1577 1578 1579 1580	Delphini Antinoi Aquilæ Antinoi	8.9 8 7.8 7.8 7.8	1 3 2 2 2	h. m. s. 20 19 16,06 19 58,88 20 0,71 20 8,79 20 14,16	3,163 3,022 2,916	,5847 ,5834 ,5875	,7386 ,7374	+0,4561 ,5001 ,4803 ,4648 ,4861	-7,5221 + 7,2054
1581 1582 1583 1584 1585	Vulpeculæ Delphini Antinoi	7.8 7.8 8 8.9 8.9	1 2 2 2 2 2	20 14,52 20 35,65 21 22,86 21 53,02 21 56,38	2,920 3,163 3,181	,5884 ,5884	,7403 ,7368	,4654 ,5001 ,5026 ,5036	+7,7174 -7,5258 -7,6049
1586 1587 1588 1589 1590		7.8 8 8 8	3 4 3 2 2	21 59,63 22 37,00 22 39,26 22 42,74 23 20,24	3,522 3,522 2,692	,6249 ,6252 ,6148	,7685 ,7684	,5468 ,4301	-7,8592 -8.2111 -8,2117 +8,1304 -7,4329
1591 1592 1593 1594 1595	Delphini seq.	7.8 7 8 7 7	3 2 1 1 1	23 23,30 23 26,95 23 45,67 24 58,71 25 49,45	1,849 1,853 2,381	,7696 ,7701 ,6703	,9102 ,9094 ,8044	,2679	+8,6433 +8,6434
1596 1597 1598 1599 1600	Aquarii Delphini Aquarii Draconis Aquilæ	8 7.8 8 7 8.9	1 2 2 2 2 2	25 55,05 26 19,26 26 21,34 26 21,57 <b>2</b> 6 26,70	2,797 3,248 0,381	8,6059	8,7343 9,1 <i>5</i> 94	9,5809	
1601 1602 1603 1604 1605	Delphini Cygni Aquilæ ————————————————————————————————————	8 8.9 8 8 8.9	1 2 2 3 3	26 36,17 26 46,99 26 55,81 27 29,46 27 35,59	2,360 3,116 3,016	,6795 ,6016 ,6030	,8066 ,7279 ,7272	+0,4570 ,3729 ,4936 ,4794 ,4571	+8,4212
1606 1607 1608 1609 1610	Aquilæ Cephei	6.7 7.8 8 7 7	2 2 3 1 2	27 45,93 28 25,35 28 42,28 28 43,05 29 14,68	3,032 3,103 1,233	+8,8581 ,6051 ,6059 ,9049 ,7917	8,7256 8,7252	+0,1676 ,4817 ,4918 ,0910 ,2639	+7,1370 -7,1188
1611 1612 1613 1614 1615		7.8 7.8 7.8 7.8 8	2 1 2 2 1	29 25,21 29 30,61 29 35,21 30 3,80 30 13,21	3,160 1,863 1,746	+8,6282 ,6091 ,7874 ,8126 ,6198	-8,7448 ,7255 ,9037 ,9271 ,7333	+0,5321 ,4997 ,2702 ,2420 ,4522	-8,1092 -7,5436 +8,6628 +8,7050 +7,9563
1616 1617 1618 1619 1620	Capricorni Delphini Cephei Delphini Cygni	8.9 7.8 7.8 7.8	3 2 2 2 2 1	30 22,40 30 35,49 30 49,29 30 57,24 31 24,21	2,833	,6152	8,7332	+0,5266 ,4522 ,0596 ,4654 ,3908	+7,9654 +8,8700 +7,7569

No.	No.	Declination	Annual Preces-		Logarith	ms of		zi No.	Annus	l P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	b'	c'	d'	Pıazzi	A. R.	Decn.
1576 1577 1578 1579 1580	3 4 2 3 3	+10 49 14,66 - 4 58 5,16 + 2 24 1,18 + 7 53 55,70 + 0 20 42,57	" +11,458 11,511 11,511 11,520 11,530	+9,7634 +9,5575 +9,6702 +9,7340 +9,6425	+9,0312 8,6965 +8,3811 +8,8976 +7,5458	,0611 ,0611 ,0615	,9131 ,9131	143 148 149 151 152	+,020 +,005 +,011 +,007 +,001	- ,04 - ,21 + ,02 - ,13 - ,45
1581 1582 1583 1584 1585	2 3 2	+23 15 + 7 43 12,94 - 4 58 - 5 55 59,39 - 6 22 9,41	11,525 11,549 11,611 11,649 11,649	+9,8585 +9,7324 +9,5587 +9,5416 +9,5327	+9,3563 +8,8895 -8,7003 -4,7787 -8,8081	+1,0616 ,0625 ,0649 ,0663 ,0663	+9,9128 ,9124 ,9112 ,9105 ,9105	155 156 158 159 160	+,019 +,010 +,001 +,012 +,005	- ,16 - ,10 - ,02
1586	2	-10 34 42,07	11,653	+9,4425	9,0278	+1,0664	+9,9104	161	+,010	- ,14
1587	2	-22 42 9,05	11,696	+8,9395	9,3522	,0680	,9096	166	+,011	,00
1588	3	-22 42 34,59	11,701	+8,9395	9,3527	,0682	,9095	167	+,021	- ,04
1589	3	+19 7 24,38	11,701	+9,8299	+9,2818	,0682	,9095	171	+,005	- ,11
1590	4	- 3 59 20,19	11,748	+9,5763	8,6077	,0700	,9086	175	+,012	- ,05
1591	3	+13 42 48,81	11,748	+9,7612	+9,0374	+1,0700	+9,9086	178	+,005	- ,18
1592	1	+48 22 34,24	11,748	+9,9513	+9,6417	,0700	,9086	183	+,008	- ,07
1593	3	+48 19 23,05	11,772	+9,9508	+9,6422	,0708	,9081	184	-,018	- ,23
1594	3	+32 32 57,57	11,862	+9,9031	+9,5030	,0741	,9063	190	-,003	- ,07
1595	1	+48 39 48,38	11,917	+9,9494	+9,6499	,0762	,9053	199	+,005	+ ,03
1596	3	- 9 38 <b>2</b> ,54	11,932	+9,4683	-8,9976	+1,0767	+9,9050	193	+,013	- ,20
1597	2	+14 9 26,99	11,960	+9,7903	+9,1645	,0777	·,9044	198	+,009	- ,09
1598	1	- 9 33 43,82	11,964	+9,4698	-3,9958	,0779	,9043	195	-,006	- ,20
1599	2	+68 13 21,28	11,950	+9,8621	+9,7433	,0774	,9046	208	+,022	+ ,13
1600	2	+ 1 57 3,96	11,969	+9,6637	+8,3116	,0781	,9042	197	+,021	+ ,02
1601	2	+10 45 12,04	11,978	+9,7597	+9,0478	+1,0784	+9,9040	201	+,004	- ,09
1602	2	+33 28 3,15	11,988	+9,9052	+8,5185	,0787	,9038	204	+,016	- ,02
1603	2	- 2 36 39,90	12,002	+9,5977	-8,4340	,0792	,9036	202	+,010	,00
1604	3	+ 2 44 38,44	12,038	+9,6730	+8,4623	,0806	,9028	205	+,004	- ,14
1605	3	+10 46 44,33	12,048	+9,7308	+9,0510	,0809	,9026	206	+,023	+ ,23
1606	2 4 3 2 2	+56 13 33,05	12,053	+9,9566	+9,6989	+1,0811	+9,9025	217	+,009	+ ,08
1607		+ 1 55 55,95	12,104	+9,6637	+8,3128	,0829	,9015	214	+,013	- ,63
1608		- 1 52 37,81	12,127	+9,6180	-8,2947	,0838	,9010	216	+,010	- ,07
1609		+59 52 3,01	12,118	+9,9576	+9,7185	,0834	,9012	222	+,007	- ,22
1610		+49 12 38,91	12,156	+9,9469	+9,6620	,0848	,9004	226	+,002	- ,12
1611	2 3 2 2	-17 37 56,02	12,174	+9,2380	-9,2644	+1,0854	+9,9000	218	+,008	- ,01
1612		- 4 57 0,35	12,178	+9,5611	-8,7181	,0856	,8999	221	+,009	- ,17
1613		+48 36 54,78	12,178	+9,9460	+9,6590	,0856	,8999	230	+,016	,00
1614		+51 17 28,89	12,211	+9,9494	+9,6771	,0867	,8993	236	+,011	+ ,07
1615		+12 31 25,58	12,229	+9,7752	+9,1219	,0874	,8989	231	-,001	- ,02
1616 1617 1618 1619 1620	2 2 2 2 2 1	-15 32 47,39 +12 45 25,18 +61 10 48,83 + 7 57 2,56 +30 0 20,18	12,234 12,253 12,263 12,276 12,312	+9,3139 +9,7767 +9,9552 +9,7324 +9,8870	-9,2134 +9,1306 +9,7292 +8,9288 +9,4876	+1,0876 ,0882 ,0885 ,0890 ,0903	+9,8987 ,8984 ,8982 ,8979 ,8971	229 235 252 238 249	+,009 +,024 +,020 +,021 +,004	- ,13 - ,03 + ,04 - ,13 - ,17

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-	eces-					
				Jan 1, 1836.	sion.	а	ь	c	d		
1621 1622 1623	Delphini Aquarii Delphini	7 7 7.8	1 2 2	h. m. s. 20 31 28,43 31 39,80 31 45,57	+2,780 3,127 2,829	+8,6279 8,6134 8,6240	8,7367 8,7214 8,7314	+0,4440 0,4951 0,4516	+8,0488 -7,3602 +7,9689		
1624 1625	Ceph <b>e</b> i	7 7	2	32 0,13 32	2,921 0,179	8,6179 9,0790	8,7243 9,1859	0,4655 9,2528			
1626 1627	Delphini	7.8 8	2 2	32 8,12 32 8,57		+8,6251 ,6249	8,7310 ,7308	+0,4515 ,4518	+ 7,9722 + 7,9687		
1628 1629 1630	Aquarii Delphini	8.9 8 7	2 1 2	32 47,87 33 20,34 33 22,97	3,282	,6245	,7278 ,7186 ,7376	,5292 ,4935 ,4390	-7,9248		
1631 1632 1633 1634	Vulpeculæ Acquarii Delphini Capricorni	8 8 7.8 8	1 2 1 2	33 40,21 33 42,71 33 51,45 34 4,60	3,281 2,865 3,586	+8,6623 ,6268 ,6264 ,6667	8,762 <b>2</b> ,7 <b>2</b> 64 ,7253 ,7648	+ 0,4098 ,5160 ,4571 ,5546	+8,2966 -7,9276 +7,9070 8,3147		
1635 1636	Delphini Delphini	8 9	1	34 11,63 35	2,823 2,778	,6305 +8,6371	,7286 —8,7318	,4507 +0,4437	+7,9896 +8,0654		
1637 1638 1639 1640	Cygni Delphini Cygni Vulpeculæ	7.8 7.8 7.8 8.9	1 2 1 2	35 15,49 35 <b>2</b> 9,41 35 57,04 36 16,25	2,341 3,004 2,344	,7078 ,6228 ,7090 ,6673	,8018 ,7157 ,8003 ,7574	,3694 ,4777 ,3700 ,4114	+8,4661 +7,4085 +8,4663 +8,2973		
1641 1642 1643 1644 1645	Delphini Aquarii Cephei Aquarii Delphini	7.8 8 8.9 8	1 1 2	36 27,77 36 37 2,70 37 8,04 37 45,12	3,058 0,891 3,232	+8,6436 ,6245 ,9923 ,6313	-8,7329 8,7133 9,0798 8,7178	0,5095	+8,1095 +6,6067 +8,9481 -7,8272		
1646 1647 1648 1649 1650	Vulpeculæ Cygni Cephei	8.9 8 7.8 7 8	2 1 9 9 2	38 25,76 39 3,30 39 26,48 39 42,30	2,576 2,473 1,074 1,089	+8,6733 ,6930 ,9705 ,9689	8,7723 9,0488 9,0461	+ 0,4109 ,3932 ,0310 ,0370	+8,3931 +8,9196 +8,9174		
1651 1652 1653 1654 1655	Vulpeculæ Equulei Vulpeculæ	7.8 8 8 8 8 7.8	3 2 2 2 3	40 2,09 40 23,75 40 43,78 40 57,54 41 11,43 41 40,93	1,094 2,579 2,970 2,575	,6789 ,6367 ,6808	8,7516 8,7082 8,7516	,4728 ,4108	+ 8,3145 +7,6182 +8,3198		
1656 1657 1658 1659 1660	Cephei Aquarii Capricorni Aquarii	8.9 8.9 9 8.9	1 2 2 2	43 43 10,54 43 37,33 43 40,55 43 47,97	1,624 3,163 3,372 3,162	+8,8803 ,6415 ,6594 ,6424	8,9442 ,7046 ,7208	,5001 ,5279	+7,1455 +8,7936 -7,6137 -8,1195 -7,6079 -7,4650		
1661 1662 1663 1664 1665	Equulei Capricorni Delphini	8.9 7 8 7.8 7	2 1 2 1 2	43 50,64 43 59,75 44 10,38 44 26,29 44 30,79	3,081 2,945 3,579 2,888	+8,6409 ,6445 ,6915	8,7017 ,7046 ,7508	+0,4887 ,4691 ,5538 ,4606	-6,7381 +7,7294 -8,3473 +7,8943		

ı .	1	1	1		<del></del>				<del></del>	
No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarit	hms of		zzi No.	Annua	l P. M.
			sion.	a'	<b>b</b> '	c'	d'	Piazzi	A. R.	Decn.
1621 1622 1623 1624 1625	3 2 3 2 1	+15 15 57,88 - 3 13 30,85 +12 45 25,38 + 7 52 24,31 +69 58 5,08	+12,313 12,326 12,336 12,354 12,344	+9,7973 +9,5899 +9,7760 +9,7308 +9,9489	-8,5357 +9,1341	,0908 ,0911 ,0918	,8968 ,8966 ,8962	246 251 253	+,001 +,006 +,012 +,005	
1626 1627 1628 1629 1630	2 1 3 2 3	+12 50 44,84 +12 43 51,01 -11 31 23,59 - 2 35 56,19 +16 59 35,22	12,363 12,363 12,409 12,445 12,445	+9,7767 +9,7760 +9,4314 +9,6010 +9,8089	+9,1373 +9,1339 -9,0920 -8,4469 +9,2590	,0921 ,0937 ,0950	,8960 ,8950 ,8942	256	+,008 +,010 +,012 +,016 +,017	,01 ,06 ,07 ,04 + ,06
1631 1632 1633 1634 1635	2 1 2 2 1	+25 30 3,67 -11 33 1,73 +10 59 13,50 -26 24 35,19 +13 12 33,56	12,467 12,473 12,487 12,500 12,500	+9,8621 +9,4314 +9,7597 +8,6232 +9,7789	+9,4281 -9,0949 +9,0751 -9,4429 +9,1541	+1,0958 ,0960 ,0964 ,0969 ,0969	+9,8937 ,8936 ,8933 ,8930 ,8930	268 262 269 266 271	+,014 +,008 +,016 +,006 +,012	- ,10 - ,05 - ,11 - ,10 - ,05
1636 1637 1638 1639 1640	2 2 3 3	+15 32 43,07 +34 57 55,89 + 3 29 35,06 +34 52 13,94 +25 14	12,559 12,573 12,591 12,618 12,641	+9,7973 +9,9036 +9,6812 +9,9031 +9,8591	+9,2252 +9,5557 +8,5838 +9,5564 +9,4298	+1,0990 ,0994 ,1001 ,1010 ,1018	+9,8917 ,8914 ,8910 ,8904 ,8899	275 278 277 283 287	+,036 +,010 +,005 +,001	,09 ,17 ,07 ,20
1641 1642 1643 1644 1645	2 3 1 3	+16 59 6,16 + 0 32 +64 33 42,20 - 9 2 42,54 +11 3 6,10	12,654 12,663 12,686 12,703 12,745	+9,8075 +9,6444 +9,9474 +9,4885 +9,7589	+9,2662 +7,7828 +9,7671 -8,9979 +9,0866	+1,1022 ,1025 ,1033 ,1039 ,1053	+9,8896 ,8894 ,8889 ,8884 ,8875	288 286 295 290 292	+,015 +,000 +,011 +,026	+ ,02 - ,02 + ,15 - ,09
1646 1647 1648 1649 1650	3 2 2 1 1 4	+25 30 44,69 +30 3 46,82 +62 45 37,85 +62 37 31,58 -13 12 37,16	12,785 12,830 12,848 12,866 12,902	+9,8591 +9,8808 +9,9450 +9,9445 +9,3927	+9,4395 +9,5063 +9,7559 +9,7659 9,1673	+1,1067 ,1082 ,1088 ,1094 ,1106	+9,8866 ,8855 ,8851 ,8847 ,8838	300 308 315 317 311	+,010 +,007 +,046 +,005 +,002	- ,11 - ,15 - ,07 + ,27 + ,04
1651 1652 1653 1654 1655	3 3 2 2	+62 37 0,18 +25 34 41,00 + 5 28 54,25 +25 47 37,91 + 1 49 46,15	12,915 12,947 12,963 12,978 13,014	+9,9440 +9,8579 +9,7033 +9,8591 +9,6618	+9,7576 +9,4457 +8,7923 +9,4502 +8,3214	+1,1111 ,1121 ,1127 ,1132 ,1144	+9,8835 ,8829 ,8823 ,8820 ,8811	326 319 318 324 327	+,006 ,001 +,013 +,000 +,007	+ ,05 - ,09 - ,12 - ,06 - ,10
1656 1657 1658 1659 1660		+54 57 5 24 22,17 16 46 29,83 5 18 52,13 3 49 45,75	13,102 13,110 13,141 13,141 13,148	+9,2945 +9,5587	+9,7285 -8,7879 -9,2768 -8,7822 -8,6402	+1,1172 ,1176 ,1186 ,1186 ,1189	+9,8791 ,8788 ,8780 ,8780 ,8778	343   344	+,012	- ,21 + ,22 - ,16 - ,06
1661 1662 1663 1664 1665	2 2 1	- 0 43 50,53 + 6 58 22,33 -26 55 47,12 +10 7 8,29 +27 38 23,36	13,149 13,163 13,176 13,189 13,193	+9,7185 +8,6628	7,9141 +8,9022 9,4736 +9,0636 +9,4850	+1,1189 ,1193 ,1198 ,1202 ,1204	+9,8778 ,8774 ,8771 ,8768 ,8767	352 348 354	+,010 +,013 +,017	— ,11 — ,01 — ,15 — ,16 — ,04

No.	Star's name and	Mag.	No.	Right Ascension	Annual Preces-		Logarit	hms of	
	•	J	Obs.	Jan. 1, 1836.	sion.	а	ь	с	d
			i .	h. m. s.	5.				
1666	Equulei pre.	8.9	4	20 44 38,92	+2,949	+8,6456	<b>8,7034</b>	+0,4697	+7,7147
1667	seq.	9	2	44 40,06	2,950	,6457	,7032	,4698	+7,7138
1668	Capricorni	7.8	1	44 41,46	3,562	,6899	,7472	,5517	-8,3346
1669	Aquarii	6.7		45	3,200		,7031		<b>-7,762</b> 3
1670	-	<b>7.</b> 8	2	45 26,54	3,158	,6461	,7008	,4994	-7,5992
1671	Capricorni	8.9	1	45 36,74	3,572	+8,6939	_8,7476	+0,5529	<b>—8,3467</b>
1672	Cephei	8	1	45 37,24	0,408	9,0970	9,1517	9,6107	+9,0681
1673	Microscopii	8.9	2	45 45,54	3,697	8,7175	8,7707	0,5678	-8,4435
1674	Capricorni	8	1	45 47,41	3,353	8,6621	8,7153	0,5254	-8,0998
1675	Equulei	7.8	,1	45 54,05	3,010	8,6461	8,6990	0,4786	+7,4127
1676	Aquarii	8	1	46 18,58	3,204	+ 8,6503	<b>8,7015</b>	+0,5057	7,7820
1677	Delphini	9.10	1	46	2,877	,6548	,7047	,4589	+7,9289
1678	Aquarii	8	1	46 48,48	3,047		,6968	,4839	+6,9684
1679	<b>Equ</b> ulei	7.8	2	47 3,42			,6994	,4694	+7,7318
1680	Capricorni	8.9	1	47 35,47	3,362		,7134	,5266	<b>—8,1199</b>
1681	Equulei	8	2	47 44,40	2,944	+8,6526	8,6984	+0,4689	+7,7426
1682	Capricorni	9	1	48 0,27		,6689	,7134		-8,1294
1683	Aquarii	8	1	48 19,74		,6539	,6974	,5039	<b>—7,7449</b>
1684	Microscopii	8	2	48 25,80					-8,4519
1685	Aquarii `	7.8	2	48 27,53	3,049	,6509	,6939	,4842	+6,9407
1686	Aquarii	7	2	48 55,60	3,135	+ 8,6528	<b>—8,694</b> 0	+0,4962	_7,4796
1687	Cephei	7.8	3	49 43,73			,9763	,1605	
1688	Aquarii	7	2	50 10,02			,6923	4975	-7,5454
1689	Capricorni	8	2	50 14,43			,7114	,5287	-8,1531
1690	Aquarii	8	2	50 15,61	3,136	,6556	,6917	,4964	<b>7,4</b> 919
1691	Capricorni	7.8	3	50 32,12	3,589	+ 8,7092	<b>—8,7441</b>	+0,5550	<b>—8,3803</b>
1692	Cygni	8	2	50 56,18			,7645	3897	
1693	Aquarii	9.10		51	3,096		,6890	,4908	<b>—7,1118</b>
1694		8	3	52 0,97	3,170		,6900	,5011	<b>—7,6785</b>
1695	Cygni	8	2	52 20,97	2,228	,7791	,8077	,3479	+8,5937
1696		8	2	52 21,79		+ 8,7748	<b>—8,8034</b>		+8,5835
1697	Delphini	7.8	2	52 36,72	2,907	,6638	,6936		+7,8753
1698		9	5	52 47,64					
1699		8	2	53 24,37					
1700	Aquarii	8	1	53 35,82	3,271	,6706	,6941	,5147	<b>—7,981</b> 3
1701		7.8	2	53 39,84		+8,7067	<b>—8,729</b> 9	+0,5484	-8,3438
1702		8	2	54 25,22	2,707	,6913	,7118	,4325	+8,2353
1703		7.8	1 2	54 32,45			,6833	,4905	<b>—7,0955</b>
1704		7.8	3	54 45,98			,7063		-8,1941
1705	Aquarii	8.9	3	54 59,28	3,184	,6672	,6854	,5030	<b>7,7448</b>
1706			1	55 55,65	3,933	+8,7951	8,8095	+0,5947	
1707		7	2	55 56,84	2,549	,7215	,7361	,4064	+8,3983
1708		7	2	56 3,90	2,294	,7748	,7893	,3606	
1709		7	2	56 24,65			,6801	,4814	+7,2738
1710	Vulpeculæ	8	2	56 30,51	2,548	,7229	,7356	,4062	+8,4011

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	ms of		zi No.	Annual	P. M.
	Obs.		sion.	a'	<b>,</b>	c'	d'	Piazzi	A. R.	Decn.
1666 1667 1668 1669 1770	2 2 2 1 2	+ 6 43 6,30 + 6 42 31,27 -26 11 24,36 - 7 30 13,48 - 5 9 35,68	+ 13,203 13,207 13,211 13,242 13,255	+9,715 <b>2</b> +9,7152 +8,7559 +9,5211 +9,5623	+8,8878 +8,8869 -9,4636 -8,9347 -8,7736	+1,1206 ,1208 ,1209 ,1219 ,1224	+9,8765 ,8763 ,8762 ,8755 ,8751	355 356 353 360 364	*. +,019 -,060 +,033 +,001	+ ,03 - ,04 - ,12 - ,09 - ,16
1671 1672 1673 1674 1675	2 1 2	-26 43 48,23 +69 19 -32 10 16,42 -15 54 2,98 + 3 20 17,42	13,273 13,255 13,281 13,281 13,286	+8,7076 +9,9320 -8,4914 +9,3243 +9,6785	-9,4738 +9,7916 -9,5473 -9,2589 +8,5881	+1,1229 ,1224 ,1232 ,1232 ,1234	+9,8747 ,8751 ,8745 ,8745 ,8743	361 374 363 367 368	+,082 +,057 +,007 +,007 +,011	- ,08 - ,04 - ,14 - ,17
1676 1677 1678 1679 1680	2 2	- 7 47 +10 49 + 1 12 + 6 54 38,17 -16 28 28,75	13,317 13,337 13,347 13,363 13,406	+9,5172 +9,7528 +9,6532 +9,7168 +9,3117	8,9541 +9,0972 +8,1444 +8,9047 9,2778	+1,1244 ,1251 ,1254 ,1259 ,1273	+9,8736 ,8730 ,8728 ,8723 ,8713	369 371 372 373 375	+,014 +,008 +,012 +,009	- ,02 ,00
1681 1682 1683 1684 1685	1 2 2 2 2	+ 7 2 50,39 -16 47 49,95 - 7 5 42,19 -32 19 50,86 + 1 6 0,14	13,407 13,428 13,446 13,455 13,455	+9,71853 +9,3032 +9,5302 -8,4624 +9,6513	+8,9154 9,2866 8,9176 9,5549 +8,1167	+1,1273 ,1280 ,1286 ,1289 ,1289	+9,8712 ,8706 ,8702 ,8699 ,8699	378 377 385 384 388	+,002 +,018 +,013 +,020 +,009	,09 ,05 ,00 ,10 ,16
1686 1687 1688 1689 1690	2 4 3 2 3	- 3 51 42,72 +58 41 11,27 - 4 28 20,48 -17 30 34,75 - 3 56 47,59	13,485 13,532 13,563 13,567 13,572	+9,5832 +9,9525 +9,5752 +9,2878 +9,5821	-8,6549 +9,7610 -8,7202 -9,3086 -8,6669	+1,1298 ,1312 ,1323 ,1325 ,1326	+9,8691 ,8680 ,8670 ,8669 ,8668	390 400 396 394 397	+,013 +,015 +,007 +,027 +,014	+ ,01 + ,06 - ,06 + ,06 - ,10
1691 1692 1693 1694 1695	3 3 4 3	-27 58 20,14 +32 40 18,40 - 1 38 - 5 59 35,66 +40 43 30,40	13,588 13,610 13,640 13,682 13,699	+8,5798 +9,8814 +9,6170 +9,5514 +3,9058	-9,5025 +9,5643 -8,2877 -8,8522 +9,6493	+1,1333 ,1338 ,1348 ,1362 ,1367	+9,8662 ,8658 ,8649 ,8638 ,8633	398 407 408 416 420	+,015 +,016 +,008 +,020	- ,11 + ,03 - ,11 + ,03
1696 1697 1698 1699 1700	3 2 1 3	+40 3 53,26 + 9 21 26,93 + 9 21 33,13 + 6 31 40,30 -11 49 14,38	13,699 13,677 13,729 13,772 13,784	+9,9042 +9,73×0 +9,7380 +9,7110 +9,4425	+9,6434 +9.0456 +9,0472 +8,8942 -9,1481	+1,1367 ,1360 ,1376 ,1390 ,1394	,8639	421 419 422 427 426	+,011 +,018 +,015 +,010 +,019	- ,12 - ,09 - ,05 - ,06 - ,08
1701 1702 1703 1704 1705	3 2 3 2 2	-25 42 57,50 +20 27 48,98 - 1 33 57,23 -18 45 13,89 - 6 52 56,19	13,788 13,835 13,843 13,860 13,873	+8,8808 +9,8189 +9,6180: +9,2528: +9,5378		,1410 ,1412	,8588	425 434 432 433 438	+,019 +,019 +,005 +,003 +,014	-,13 -,03 +,06 ,00 +,05
1706 1707 1708 1709 1710	1 1 2 1 2	-42 1 58,26 +28 20 28,68 +38 51 55,43 + 2 17 42,30 +28 26 46,02	13,936 13,932 13,935 13,961 13,965	-9,2014 +9,8591 +9,8971 +9,6656 +9,8591	-9,6678 +9,5188 +9,6399 +8,4496 +9,5213	,1440 ,1441 ,1449	,8566 ,8558	442 447 452 448 453	-,037 +,009 -,002 + 014 -,001	- ,15 - ,06 - ,02 ,00 - ,25

No.	Star's name and	Mag.	No. Obs.		nsion	Annual Preces-	,	Logari	thms of	
				Jan. 1,	, 1836.	sion.	a	b	c	d
711	Cygni	6.7	2	h. m. 20 56	43,35	s. +2,319	+8,7710	8,7829	÷ 0,3653	+8,560
712	Vulpeculæ	0.7	~	20 50 57	40,00	2,659	,7047	7151	,4247	+8,299
713	Microscopii	7.8	2		44,84	3,657	,7397	7473	,5631	-8,460
714	Vulpeculæ	8	3	57		2,664	,7056			+8,296
715	Capricorni	8	2	58	0,52	3,352	,6885	,6953		-8,144
716	Capricorni	7.8	2	58	5,15	3,348				
717		7	2	58		3,409	,6996	,7027	,5327	
718	Vulpeculæ	7	2	58		2,553	,7268			+8,408
719	Capricorni	8	3		50,57	3,345		,6929		
720	Aquarii	7	2	59	2,10	3,171	,6744	,6775	,5012	7,709
721	Equulei	8	3	59		3,010	+8,6728	-8,6756		
722	Vulpeculæ	8	1	59		2,600	,7196		,4150	
723 7 <b>24</b>	Cygni	8	2 1		32,25		,7803			+8,576
725	Vulpeculæ Microscopii	8.9 7.8	2	_	7,12 14,18	2,672 3,620	,7092 ,7383	,7082 ,7365	,4268 ,5587	+8,297 $ -8,445$
726	Capricorni	7.8	2		14,71	3,361	+8,6943	_8,6925	+0,5265	!
727	Equulei	7.0	2		22,09	2,963	,6771		,4717	+7,722
728	Cygni	8	! î		33,47	1,863	,8851	,8826		+8,78
799	Microscopii	7.8	2	Ŏ		3,592	,7339	,7304		
730	Cygni	9	1	_	49,48	2,310	,7839	,7801	,3636	+8,581
731	Capricorni	8	1	1	1,26	3,344	+8,6936	8,6890	+0,5243	<b>—8,14</b> 3
732	<b>E</b> quulei	9	1	1	10,65	3,010		,6717		+7,464
733	Cygni	8		1	-	2,060	,8435	,8370	,3139	+8.708
734	Equulei	8	3	1	41,03	3,030	,6772	,6702	,4814	+7,280
735	Aquarii	7.8	2	1	56,21	3 <b>,2</b> 33	,6840	,6760	,5096	7 <b>,</b> 923
736	Cygni	8	2	2		2,534	+8,7391	<b>-8,730</b> 2	+0,4038	
737 738	Equulei	8	1	2	•	2,902	,6847		,4627	+7,927
739	Piscis Aust.	0	,	2	40.00	3,562	,7324	,7217 ,6976	,5517	
740	Capricorni Aquarii	8 7.8		2 3	42,60 1,96	3,426 3,3 <b>2</b> 1	,7087 ,6950	,6826	,5348 5213	8,262 8,113
	-			J			·		,0010	
741	Cygni	7.8	2	3	8,87	2,601	+8,7285	-8,7158	+0,4151	+8,380
742	Aquarii	9.10	2	4	4,02	3,195	,6854	,6692	,5045	-7,818
743 744	Picis Aust.	7.8	2	4	9,29	3,610	,7453	,7 <b>2</b> 89	,5575	-8,448
745	Equulei Cygni	7.8 7.8	2 2		18,57 19,39	2,886 2,598	,6899 ,7314	,6730 ,7145	,4603 , <b>41</b> 46	+7,975 +8,387
746			!!							-
740	Vulpeculæ	8 8	2 2		23,94	2,676 2,686	+8,7177 ,7164	,6984	+0,4275	+8,308
748	Capricorni	8.9	3		33,93 38,20	3,418	,7115	,6930	,4291 ,533 <b>8</b>	+8,298 -8,260
749	Aquarii	7.8	1	4	49,80	3,174	,6856	,6664	,5016	-7,743
750	Cygni	6	2	5	11,60	1,847	,9030	,8827	,2665	+8,804
751	Equulei	8	3	5	25,39	2,896	+8,6911	<b>—8,6699</b>	+0,4618	+7 <b>,9</b> 53
752	Capricorni	8.9	2	5	37,72	3,429	,7153	,6931	,5352	<b>-8,278</b>
753		7	1	5	34,68	3,449	7185	,6963	,5377	<b>8,30</b> 0
754	Equulei	9	2		17,44	2,897	,6921	,6688	,4619	+7,953
755 }	Aquarii	8	2	7	0,29	3,226	,6931	<b>,</b> 6655	,5087	<b>7,92</b> 3

No.	No. Obs.		Annual Preces-		Logari	thms of		zzi No.	Annua	al P. M.
			sion.	a'	b'	c'	· d'	Piazzi	A. R.	Decn.
1711 1712 1713 1714 1715	1 2 2	+38 0 43,46 +23 10 32,99 -31 42 50,84 +22 57 2,58 -16 37 27,31	+13,976 14,002 14,048 14,053 14,061	+9,8938 +9,8331 -7,7781 +9,8312 -9,3263	+9,4394 -9,5662	,1462 ,1476 ,1478	,8546 ,8532 ,8531	455 457 459 464 460	+,017 +,025 +,011 +,027	- ,02   + ,15   + ,09   - ,02   + ,03
1716 1717 1718 1719 1720	3 1 3	-16 23 37,58 -19 44 23,89 +28 26 44,01 -16 16 42,57 - 6 13 52,45	14,069 14,074 14,090 14,114 14,123	+9,3324 +9,2253 +9,8573 +9,3385 +9,5490	-9,2966 -9,3749 +9,5251 -9,2950 -8,8825	,1484 ,1489 ,1497	,8520 ,8612	461 462 467 466 470	-,008 -,005 +,003 +,005 +,025	- ,09 - ,11 - ,04 - ,11 + ,12
1721 1722 1723 1724 1725	4 1 1 3	+ 3 29 15,68 +26 16 21,32 +38 40 22,47 +22 45 -30 22 54,92	14,127 14,136 14,152 14,189 14,202	+9,6776 +9,8470 +9,8932 +9,8280 +8, <b>2</b> 553	+8,6338 +9,4946 +9,6447 +9,4380 -9,5539	+1,1501 ,1503 ,1508 ,1520 ,1523	,8506 ,8501	471 473 480 482 477	+,009 +,008 -,003 +,015 -,009	- ,06 + ,05 - ,01 - ,15
1726 1727 1728 1729 1730	1 2 1 2 1	-17 16 32,16 + 6 19 54,93 +51 57 56,48 29 9 6,09 +38 50 25,45	14,205 14,206 14,214 14,231 14,234	+9,3117 +9,7067 +9,9149 +8,5563 +9,8921	9,3225 +8,8954 +9,7472 9,5386 +9,6488	+ 1,1523 ,1525 ,1527 ,1532 ,1533	+9,8486 ,8485 ,8482 ,8477 ,8476	481 484 490 483 489	+,010 +,010 -,011 +,014 -,002	- ,07 + ,03 00 - ,06 + ,07
1731 1732 1733 1734 1735	2 2 1 3 3	-16 21 40,79 + 3 30 5,39 +47 4 34,33 + 2 16 51,98 -11 0 56,43	14,247 14,262 14,279 14,288 14,304	+9,3385 +9,6776 +9,9079 +9,6646 +9,4843	-9,3012 +8,6399 +9,7175 +8,4565 -9,0932	+1,1537 ,1542 ,1547 ,1550 ,1556	+9,8472 ,8469 ,8462 ,8459 ,8454	487 488 3 492 493	+,010 +,016 +,015 +,017	- ,10 - ,03 + ,05 - ,03 - ,23
1736 1737 1738 1739 1740	2 1 2 2	+99 42 48,76 +10 4 26,64 -27 56 -20 59 50,06 -15 13 34,65	14,317 14,321 14,345 14,353 14,373	+9,8597 +9,7396 +8,7482 +9,1903 +9,3729	+9,5493 +9,0972 -9,5251 -9,4090 -9,2742	+1,1558 ,1560 ,1567 ,1569 ,1576	+9,8450 ,8449 ,8441 ,8438 ,8432	9 5 4 8 11		- ,11 - ,16 - ,08 - ,16
1741 1742 1743 1744 1745	2 3 2 2	+26 38 11,84 — 7 49 —30 19 59,96 +11 6 50,64 +26 53 13,97	14,378 14,433 14,437 14,447 14,447	+9,8451 +9,5263 +8,3979 +9,7482 +9,8457	+9,5075 -8,9900 -9,5606 +9,1436 +9,5133	+ 1,1577 ,1594 ,1595 ,1598 ,1598	+9,8431 ,8412 ,8411 ,8408 ,8408	13 16 14 19 22		00 ,15 ,02 + ,03
1746 1747 1748 1749 1750	2 2 2 2 2 2	+22 55 1,35 +22 24 52,64 -20 45 40,16 -6 34 56,54 +52 53 44,18	14,450 14,463 14,471 14,483 14,498	+9,8261 +9,8228 +9,2068 +9,5465 +9,9101	+9,4487 +9,4399 -9,4075 -8,9171 +9,7612	+1,1600 ,1602 ,1605 ,1608 ,1613	+9,8406 ,8403 ,8401 ,8394 ,8391	23 25 20 24 32	+,019 +,004 +,002	,05 ,02 ,16 ,01 ,07
1751 1752 1753 1754 <b>1</b> 755		+10 32 25,18 -21 27 28,06 -22 29 18,34 +10 30 44,52 - 9 47 55,74	14,515 14,531 14,531 14,547 14,615	+9,1399 +9,7427	+9,1225 -9,4231 -9,4425 +9,1221 -9,0931	+1,1618 ,1623 ,1623 ,1628 ,1648	+9.8386 ,8381 ,8381 ,8375 ,8353	27 36	-,001 +,010 -,007	- ,11 - ,11 - ,07 - ,13 - ,20

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
			O Ds.	Jan. 1, 1836.	sion.	a	ь	c	d
1756	Aquarii	8	2	h. m. s. 21 7 5,87	s. +3,230	+8,6936	<b>—8,66</b> 58	+0,5092	
1757	Capricorni	7	lī	7 21,29	3,415	,7167		,5334	-8,267
1758	Piscis Aust.	7	2	7 33,45		,7564	,7269	,5593	-8,473
1759	Cephei	6.7	1	7 37,37			,9504	,1847	+8,914
1760	Equulei	7	2	8 5,14	2,907	,6952	,6638	,4634	+7,935
1761	Equulei	8	2	8 11,09		+8,6957	<b>—8,6639</b>	+0,4628	+7,946
1762		7.8	2	8 34,70		6909,	,6574	,4764	+7,593
1763		7.8	2	8 36,71	1,529	,9832	,9501	,1844	+ <b>8,</b> 918
1764	Piscis Aust.	7		9 12,16		,7506		,5538	8,442
1765	Cygni	7	1	9 13,11	2,271	,8150	,7796	,3562	+ 8,635
1766		8.9	1	9 29,18		+8,7135	-8,6768	+0,4423	
1767	Aquarii	7.8	1	9 33,42	3,275		,6653	,5152	
1768	Piscis Aust.	7.8	2	10 12,35	3,544	,7458	,7063	,5495	
1769 1770	Pegasi Equulei	7.8 7	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	10 17,98 10 33,73			,6720 ,6566	,4461 ,4679	+8,176 +7,856
1771	Pegasi	7.8	١,			1	<b>-8,671</b> 2	) '	,
1772	I chasi	8	1 1	10 45,67 10 54,35		+8,7127 	,6715	+0,4459	+8,179
1773		7.8	i	11 1,97			,6535	,4453 ,5004	+8,187 $-7,726$
1774	Pegasi	7	2	11 33,06					
1775	Cygni	7.8	2	11 58,93			,7075	,4103	
1776	Piscis Aust.	7.8	2	12 4,51	3,580	+8,7573	  —8,7105	+0,5539	<b>—8,454</b>
1777		8	2	12 10,25		,6960	,6489	,4915	-7,2634
1778	Cephei	7.8	2	12 20,16		,9386	,8913	,2524	+8,852
1779		7.8	2	12 35,90		,7061	,6575	,5131	-8,028
1780	Equulei	7.8	3	13 47,58	3,011	,6991	,6462	,4787	+ 7,505
1781	Pegasi	7	2	13 58 <b>,2</b> 9		+8,7321	8,6784	+0,4312	+8,309
1782		7.8	3	13 59,07		,6995	,6458	,4784	+7,522
1783	Aquarii	8	3	14 16,10			,6453	<b>,496</b> 0	-7,5668
1784	Pegasi	8.9	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	14 35,72		,7350	,6801		+8,330
1785	Capricorni	7.8	2	14 42,37	3,502	,7471	,6904	,5443	8,3920
1786		7	3	14 51,35		+8,7432	<b>8,6860</b>	+0,5416	<b>8,370</b>
1787		8.9	2	14 57,01			,6816	,5389	-8,3484
1788		9	3	15 47,00	3,262	7120	,6512	,5135	-8,045
1789		8	2	16 16,90			,6857	,5432	-8,389
1790	Cygni	7.8	1	16 25,9 <b>2</b>	2,328	,8199	,7570	,3670	+8,630
1791	Aquarii	7.8	2	16 37,17		+8,7036	<b>-8,6394</b>	+0,4925	<b>7,371</b>
1792	Capricorni	8 9	2	16 39,41		8,7464		+0,5413	-8,375
1793 1794	Cephei	9 7	2	17 20,93		8,9639		+0,2420	+8,885
1794 1795	Piscis Aust.	8	1 2	17 22,07 17 54,77	-0,514 +3,537	9,3303 8,7609	9,2647 8,6918	-9,7110 + <b>0,548</b> 6	+9,3179 8,438
1796	Capricorni	7.8	2	<b>18</b> 13,88	3,398	+8,7353		'	
1797		8	2	18 24,93		7195	,6487	+0,5312	-8,287
1798	Capricorni	8.9	2	18 52,02	3,424	,7193	,6681	,5169 ,5345	—8,111 —8,321
1799	Aquarii	8.9	3	19 2,65	3,289	7207	,6476	,5171	-8,115
1800		7	2	19 11,03	3,261	7178	,6439	,5133	<b>-8,057</b>

No.	No.	Declination	Annual   Preces-		Logarith	ıms of		zi No.	Annual	Р. М.
	Obs.	Jan. 1, 1886.	sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn,
1756 1757 1758 1759 1760	2 2 2 3	-10 4 10,64 -20 51 3,23 -31 25 31,39 +59 18 +10 0 22,14	" +14,619 14,635 14,647 14,643 14,674	+9,4885 +9,2095 +8,1461 +9,9074 +9,7364	-9,1048 -9,4144 -9,5806 +9,7982 +9,1050		,8343	40 41 42 51 48	+,001 -,012 +,015 +,007 +,014	- ,11 - ,18 + ,02 - ,18
1761 1762 1763 1764 1765	3 4 1 2 2	+10 15 3,50 + 4 34 16,80 +59 25 19,91 -29 26 49,72 +41 20 30,88	14,682 14,707 14,702 14,746 14,78	+9,7388 +9,6866 +9,9063 +8,6532 +9,8887	+9,1158 +8,7681 +9,8005 -9,5581 +9,6866	,1675 ,1674 ,1687	,8323 ,8308	49 53 61 55 63	+,002 -,002 +,018 +,009 +,016	- 月 - 月 - 月 - 月 - 月 - 月 - 月 - 月 - 月 - 日 - 日 - 日 - 日 - 日 - 日 - 日 - 日 - 日 - 日
1766 1767 1768 1769 1770	1 2 2 3 2	+18 16 51,78 -12 56 50,44 -27 53 38,99 +16 56 39,91 + 8 16 34,31	14,757 14,762 14,801 14,806 14,822	+9,7952 +9,4346 +8,8388 +9,7867 +9,7210	+9,3640 -9,2165 -9,5380 +9,3335 +9,0283	,1691 ,1703	,8302 ,8288	62 59 65 67 68	+,002 +,016 +,014 +,020 +,034	+ ,07 + ,07 + ,05 - ,01 - ,11
1771 1772 1773 1774 1775	2 2 2 2 2 2	+17 2 10,54 +17 18 14,82 - 6 10 26,72 +17 8 19,68 +29 3 20,74	14,832 14,840 14,853 14,880 14,908	+9,7867 +9,7882 +9,5551 +8,7875 +9,8476	+9,3364 +9,3432 -8,8997 +9,3403 +9,5579		,8275 ,8270	69 73 70 77 80	,006 +,012 +,007 +,005 +,010	+ ,04 - ,02 - ,14 + ,01 - ,02
1776 1777 1778 1779 1780	3 2 2 3 1	-29 51 26,75 - 2 8 45,14 +55 6 35,78 - 12 8 51,70 + 3 39 6,51	14,914 14,918 14,923 14,942 15,008	+8,6434 +9,6117 +9,9009 +9,4533 +9,6767	-9,5684 -8,4392 +9,7859 -9,1944 +8,6802	+1,1736 ,1737 ,1738 ,1744 ,1763	+9,8248 ,8247 ,8245 ,8238 ,8214	78 79 86 82 90	+,021 +,018 +,010 +,015 +,009	- ,14 - ,16 - ,09 - ,01
1781 1782 1783 1784 1785	3 4 3 1 2	+22 11 48,44 + 3 47 37,85 — 4 14 26,67 +23 7 49,13 —26 15 29,92	15,019 15,019 15,038 15,053 15,065	+9,8142 +9,6785 +9,5843 +9,8189 +8,9868	+9,4523 +8,6979 +8,7417 +9,4702 -9,5215	+1,1766 ,1766 ,1772 ,1776 ,1780	+9,8210 ,8210 ,8203 ,8197 ,8193	94 91 95 103 96	+,016 +,022 +,026 -,010 +,004	+ 109 - 112 - 07 - 04 - 06
1786 1787 1788 1789 1790	3 3 2 2	-25 7 15,04 -23 59 18,71 -12 28 41,79 -25 56 25,30 +40 14 2,34	15,073 15,085 15,127 15,157 15,158	+9,0531 +9,1106 +9,4518 +9,0170 +9,8774	-9,5038 -9,4853 -9,2114 -9,5192 +9,6890	+1,1782 ,1785 ,1797 ,1806 ,1806	+9,8190 ,8185 ,8169 ,8158 ,8158	98 101 106 108 116	+,030 +,010 +,015 +,020 +,043	- ,15 - ,02 + ,06 - ,02 - ,10
1791 1792 1793 1794 1795	3 2 2 2 2 3	- 2 41 22,47 -25 11 14,40 +56 38 9,60 +76 19 17,97 -28 25 52,00	15,177 15,177 15,211 15,199 15,248	+9,6052 +9.0607 +9,8938 +9,8663 +8,8633	8,5469 9,5078 +9,8020 +9,8674 9,5585	+1,1812 ,1812 ,1821 ,1818 ,1832	+9,8150 ,8150 ,8137 ,8142 ,8122	112 111 124 137 121	+,009 +,013 +,018 -,064 +,025	- ,05 - ,15 + ,06 + ,08 - ,02
1796 1797 1798 1799 1800	2 3 3 3 3	-20 54 57,07 -14 17 40,15 -22 25 20,78 -14 24 14,54 -12 38 10,13	15,268 15,275 15,302 15,309 15,820	+9,2405 +9,4166 +9,1903 +9,4150 +9,4502	-9,4341 -9,2737 -9,4638 -9,2781 -9,2226	+1,1838 ,1840 ,1847 ,1849 ,1853	+9,8115 ,8112 ,8102 ,8099 ,8094	123 125 127 128 130	+,008 +,015 +,017 +,026 -,005	- 11 - 09 - 34 - 12 - 07

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-	•			
			O US.	Jan. 1, 1836.	sion.	а	Ь	с	d
1801	Aquarii	9.10	1	h. m. s. 21 19 14,04	s. +3,263	+8,7182	_8,6440	+0,5136	<b>-8.062</b>
1802	Cygni	9	-	19	2,176	,8657		,3377	+8,722
1803	Aquarii	8	2	19 23,64	3,115	,7082	,6335		-7,443
1804	Cephei	8	2	19 46,00		,9969			+8,930
1805	Aquarii	7	2	19 49,65	3,121	,7091	,6327	,4943	<b>-7,50</b> 3
1806	Aquarii	7.8	1	19 50,04	3,118	+8,7089	-8,6327	+0,4939	<b></b> 7,469
1807		8.9	3	20 34,66	3,262	,7203	,6410	,5135	<b>8,064</b>
1808		8.9	3	20 41,10		,7240	,6445		[-8,128]
1809	Vulpeculæ	8	2	20 56,30	2,635	,7596			+8,414
1810	Capricorni	8	3	20 56,80	3,468	,7531	,6725	,5401	<b>8,3</b> 80
1811	Cygni	6.7	2	21 8,11	2,545	+8,7795	8,6984	+0,4057	
1812		6.7	2	21 21,06		,9231	,8412	,2942	+8,820
1813		8.9	3	22 57,82		,7146			
1814 1815	Cephei Aquarii	8 8	2	23 43,49 23 50,84		,9525 ,7178	,8616 ,6259		+8,864 -7,803
	1		1	1			1	İ	
1816	1		3	23 52,57	3,526	+8,7710		+0,5473	
1817 1818		8 7	1 2	23 56,89 24 24.78		8,7456		,5311	-8,307 +8,346
1819		8	lĩ	24 24,78 24 26,66		8,7517 9,1051			
1820			4	24 32,40		8,7721	8,6774		-8,452
1821	Capricorni	8.9	2	24 37,55	3,279	+8,7290	<b>8,6343</b>	+0,5157	<b>—8,117</b>
1822	Pegasi	7.8	2	24 59,74			,6549	,4344	
1823		8.9	2	25 0,29			,6233	,5013	-7,810
1824		8.9	2	25 8,88	3,158	7189	,6221	,4991	<b>-7,746</b>
1825		8.9	2	25 31,11	3,075	,7171	,6187	,5152	6,643
1826		8	1	25 37,89	3,390	+ 8,7475	-8,6487		<b>8,304</b>
1827		8	2	25 57,16		,7240			
1828		8	1	26 8,01		,7449	,6439	,5275	<b>-8,277</b>
1829 1830		7 7.8	2 4	26 16,12 27 13,74	2,331 3,353	,8443 ,7441	,7433 ,6392	,3675	+8,666 8,258
1000	Capricoini	1.0	1	2/ 13,/4	0,000	,,,441	,0092	1	) ·
1831			1.	27		+ 9,0066	-8,9002	+0,2317	
1832		7	1	28 2,00				,4325	+8,364
1833 1834		7 8	3	28 11,97		8,7457		,5254	
1835			3	28 39,92 28 43,62			,6751 ,6579	,4131 ,5403	
1000		= 0					i	1	1
1836 1837		7.8 8.9	2 2	28 45,39 28 57,49		+ 8,7412 8,7787			8,205 8,458
1838		8	3	29 33,16					
1839	Cephei	8		29	1,593				
1840		8.9	2	30 18,35		8,7387		,5160	-8,145
1841	Cephei	7.8	2	30 30,61	1,326	+9,0988	_8,9815	+0,1225	+9,056
1842		7.8	2	31 9,57				3843	+8,627
1843	Pegasi	8	2	31 25,61	3,048		,6043	,4840	+7,119
1844	Cephei	7.8	2	31 33,37	1,350	9,0976	,9763	,1303	+9,054
1845	Capricorni	7.8	2	32 13,15	3,402	8,7618	,6371	,5317	-8,347

No.	No.	Declination	Annual Preces-		Logarith	ms of		zi No.	Annue	l P. M.
	Obs.		sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
1801 1802 1803 1804 1805	1 3 2 1 3	-12 47 44,74 +46 0 5,67 -3 8 8,28 +59 3 16,86 -3 35 36,76	+15,323   15,323   15,323   15,332   15,348   15,358	+9,4472 +9,8837 +9,5999 +9,8893 +9,5944	-9,2277 +9,7405 -9,6190 +9,8174 -8,6782	,1854 ,1856 ,1860	,8093 ,8090 ,8084	131 140 135 146 139	+,013 +,031 +,031 +,006	+ ,10 - ,55 ,00 - ,07 + ,06
1806 1807 1808 1809 1810	3 3 2 2 3	- 3 19 6,29 -12 47 24,75 -14 44 14,09 +26 52 13,23 -25 8 31,37	15,353 15,399 15,402 15,418 15,418	+9,5977 +9,4502 +9,4099 +9,8299 +9,0864	-8,6444 -9,2299 -9,2905 +9,5414 -9,5139	+1,1862 ,1875 ,1876 ,1880 ,1880	+9,8081 ,8062 ,8061 ,8055 ,8055	138 143 144 151 147	+,034 +,013 +,021 +,009 +,028	- ,03 + ,17 - ,16 + ,23 - ,21
1811 1812 1813 1814 1815	2 3 3 1 3	+31 30 40,74 +52 11 19,23 + 4 51 39,43 +54 42 7,65 - 7 1 40,43	15,425 15,436 15,529 15,565 15,580	+9,8476 +9,8865 +9,6857 +9,8837 +9,5490	+9,6045 +9,7843 +8,8178 +9,8020 —8,9765	+1,1882 ,1885 ,1911 ,1922 ,1926	+9,8052 ,8047 ,8009 ,7993 ,7987	153 156 163 170 167	+,018 +,042 +,008 +,024 +,017	+ ,09 + ,01 - ,19 - ,02 - ,03
1816 1817 1818 1819 1820	2 3 2 2 4	-28 36 27,49 -21 23 49.61 +23 7 31,68 +65 56 38,97 -28 37 10,70	15,580 15,583 15,610 15,607 15,621	+8,9031 +9,2430 +9,8096 +9,8751 +8,9085	-9,5704 -9,4525 +9,4857 +9,8519 -9,5718	+ 1,1926 ,1927 ,1934 ,1933 ,1937	+9,7987 ,7986 ,7975 ,7976 ,7970	164 165 174 183 169	+,032 +,044 +,007 +,041 +,013	- ,04 + ,04 - ,01 + ,13 - ,02
1821 1822 1823 1824 1825	3 2 1 2 2	-14 10 19,08 +22 40 23,88 - 7 5 43,80 - 6 8 21,10 - 0 30 1,57	15,621 15,642 15,642 15,650 15,672	+9,4281 +9,8069 +9,5490 +9,5611 +9,6325	9,2799 +9,4785 8,9833 8,9201 7,8193	+1,1937 ,1943 ,1943 ,1945 ,1951	+9,7970 ,7960 ,7960 ,7957 ,7948	172 178 175 176 182	+,020 -,004 +,027 +,012 -,001	- ,04 - ,01 - ,08 - ,45 ,00
1826 1827 1828 1829 1830	3 2 2 1 2	-21 10 9,09 - 9 48 44,22 -19 58 16,30 +41 34 33,16 -19 7 14,38	15,678 15,693 15,708 15,708 15,762	+9,2553 +9,5079 +9,2945 +6,8669 +9,3181	-9.4506 -9,1240 -9,4268 +9,7163 -9,4101	+1,1953 ,1957 ,1961 ,1961 ,1976	+9,7945 ,7938 ,7932 ,7932 ,7908	179 186 187 191 193	+,017 +,012 +,006 +,007 +,011	- ,01 - ,21 - ,15 + ,01 - ,04
1831 1832 1833 1834 1835	1 2 3 3 3	+58 50 51,64 +23 43 26,73 —19 10 1,86 +30 16 43,01 —26 10 39,44	15,783 15,805 15,816 15,837 15,843	+9,8756 +9,8096 +9,3201 +9,8351 +9,0755	+9,8287 +9,5019 -9,4127 +9,6006 -9,5421	+1,1982 ,1988 ,1991 ,2000 ,1999	+9,7898 ,7889 ,7884 ,7874 ,7871	205 200 199 210 204	+,009 -,001 +,023 +,026	- ,01 - ,01 - ,08 - ,14 + ,02
1836 1837 1838 1839 1840	2 2 3 3 3	-16 59 5,61 -28 37 33,53 + 5 53 43,78 +61 4 -14 47 40,66	15,848 15,859 15,888 15,883 15,930	+8,9445 +9,6946 +9,8716	-9,3627 -9,5784 +8,9123 +9,8411 -9,3066	+ 1,2000 ,2003 ,2010 ,2009 ,2022	+9,7869 ,7864 ,7851 ,7853 ,7831	206 207 216 221 218	+,014 +,017 +,019 +,015	,05 + ,03 ,10 ,16
1841 1842 1843 1844 1845	3 3 1 3	+65 0 30,52 +38 34 54,09 + 1 24 8,68 +64 51 13,34 -22 40 5,17	15,933 15,972 15,990 15,987 16,032	+9,8663 +9,8603 +9,6522 +9,8663 +9,2279	+9,8597 +9,6964 +8,2950 +9,8586 —9,4886	+1,2023 ,2033 ,2038 ,2037 ,2050	+9,7830 ,7*13 ,7803 ,7805 ,7783	229 228 227 236 <b>230</b>	+,017 +,017 +,011 +,044 -,010	- ,16 - ,12 - ,03 - ,13 + ,02

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logarit	hms of	
				Jan 1, 1836.	sion.	a	ь	c	d
1846	Capricorni	8	1	h. m. s. 21 32 17,06	+3,398	+8,7609	8 6369	+0,5312	8,341
1847	Capitotini	8	3	32 29,28	3,291	7434	,6179	,5173	-8,171
1848	Aquarii	8	3	32 45, <b>0</b> 3		,7276	,6010	,4867	
1849	riquain	8.9	2	33 31,97		7287	,5990	,4876	-6,534
1850	Capricorni	9	3	33 45,14	3,196	,7347	,6039	,5046	-7,937
1851	Cygni	6.7	2	35 6,44	2,520	+8,8163	<b>—8,6805</b>	+0,4014	+ 8,572
1852	Cephei	7.8	2	35 16,32	1,861	,9932	,8568	,2697	
1853	Aquarii	7.8	2	35 49,03	3,143	,7338	,5951	,4973	
1854	Cygni	8	2	35 57,61	2,402		,7107	,3806	+8,660
1855	Pegasi	7	3	36 26,17	2,751	,7658	,6246	,4395	+8,340
1856	Cygni	8	2	37 3,09	2,653	+8,7878	8,6442	+ 0,4237	460ء +
1857	Cephei	7.8	2	37 16,80	1,869	,9977	,8533	,2716	+8,921
1858	Pegasi seq.	8	_	37	2,751		,6218		+8,344
1859	Aquarii	· ·	3	37 49,34	3,134	7362	,5894	,4961	<b>—</b> 7,664
1860	Pegasi	87	2	38 31,01	2,710	7778	,6281	,4330	+8,40
1861	Capricorni	8	2	38 52,67	3,301	+8,7551	<b>8,603</b> 8	+0,5186	_8,216
1862		7	2	38 56,12	2,712	8,7782	8,6269	,4333	+8,401
1863		8	1	39 44,91	. 1,138		9,0154	,0561	+9,137
1864		9	3	39 50,80	3,402	8,7752	8,6210	,5317	_×,377
1865		8.9	3	39 58,49	3,069		8,5820	,4870	<b>-6,70</b> 6
1866		7	2	40 13,92	2,927	+8,7450	<b>8,5887</b>	+0,4664	+8,002
1867	+	78.	2	41 17,05	2,593	8,8110	6503	,4138	+8,535
1868		7.8	3	41 24,25	3,299		,5972	,5181	-8,223
1869		8	2	42 4,28	3,405		,6156	,5321	8,389
1870	Cephel	8.9	2	43 10,31	1,907	9,0 <b>0</b> 69	,8386	,2803	+8,931
1871		8	2	43 11,42	1,903		8,8398		
1872		8	3	43 40 26	3,308	8,7636	,5932	,5196	-8,249
1873		8	2	43 41,97	2,367	8,8792	<b>,70</b> 90	,3742	+8,714
1874		7	3	43 52,30	2,810	8,7671	,5958	,4487	+8,281
1875		8.9	3	44 8,50	2,884	8,7558	,6834	,46 <b>0</b> 0	+8,135
1876		7.8	3	44 31,09	1,751		-8,8773	+0,2433	
1877		8	2	44 38,41	3,350		,5982	,5250	-8,322
1878		8	3	46 10,84	1,747		,8776	,2423	+8,999
1879		7.8		46 22,64			,6529		+8,597
1880	Aquarii	7.8	3	47 18,47	3,047	8,7471	,5615	,4839	+7,197
1881		8	3	47 23,78	3,649		8,6677	+0,5622	8,647
1882		7	2	47 25,09	1,824	9,0425	,8570	,2610	+8,978
1883		7.8	2	47 59,97	3,332	8,7746	,5863	,5227	-8,307
1884 1885		7.8 8	2	48 21,32 48	2,553 2,092	8,8369 8,9702	,6472 ,7839	,4070 ,2206	+ 8,599 + 8,874
1 <b>8</b> 86		7.8	2	1			•	·	
1887		7.8 7.8	2	48 44,15	2,798	+8,7770	8,5856	+0,4468	+8,321
1888		7.8 7.8	2	48 55,62	2,799	,7770	,5948		+8,319
1889		7.8 7		49 21,60	1,655		,8984	,2188	+9,041
1890		8	3	49 22,77	2,006		,806\$	,3023	+8.917
4000	-ayuain	o	1 "	51 1,98	3,156	8,7547	,5538	,4991	-7,842

No.	No.	Declination	Annual Preces-		Logarith	oms of		zi No.	Annual	P. M.
	Obs.	Jan. 1, 1836.	sion.	a'	<i>b</i> ′	c'	d'	Piazzi	A. R.	Decn.
1846 1847 1848 1849 1850	3 4 3 4 2	-22 24 9,74 -15 35 2,16 + 0 53 54,08 - 0 23 50,82 - 9 12 28,89	#16,032 16,042 16,057 16,097 16,112	+9,2380 +9,4099 +9,6434 +9,6335 +9,5224	9,4837 9,3323 +7,9115 7,7109 9,1082	+1,2050 ,2053 ,2056 ,2068 ,2071	+9,7783 ,7778 ,7771 ,7751 ,7744	231 232 237 239 240	s. +,036 +,008 +,010 +,014 -,002	- ,03 - ,11 - ,20 - ,20 - ,02
1851 1852 1853 1854 1855	4 2 3 3 3	+34 45 50,74 +56 50 22,33 - 5 28 45,14 +40 18 2,24 +22 4 11,30	16,177 16,184 16,216 16,219 16,246	+9,8407 +9,8639 +9,5752 +9,8519 +9,7938	+9,6632 +9,8300 -8,8856 +9,7190 +9,4834		+9,7711 ,7708 ,7692 ,7690 ,7676	253 256 254 261 262	+,017 +,002 +,007 +,008 +,006	- ,14 + ,01 + ,03 - ,05 + ,02
1856 1857 1858 1859 1860	3 4 1 4 5	+28 2 3,77 +56 59 19,88 +22 10 1,70 - 4 52 48,75 +24 49 47,46	16,277 16,287 16,308 16,318 16,354	+9,8176 +9,8603 +9,7924 +9,5832 +9,8041	+9,5819 +9,8335 +9,4874 -8,8393 +9,6352	+1,2116 ,2118 ,2124 ,2127 ,2136	+9,7661 ,7655 ,7644 ,7639 ,7620	267 277 274 272 279	+,010 +,043 +,023 +,013	- ,12 + ,01 - ,20 - ,17 - ,10
1861 1862 1863 1864 1865	4 1 3 3 3	-16 49 57,22 +24 48 22,82 +68 18 11,33 -23 34 34,51 - 0 33 19,15	16,375 16,375 16,408 16,422 16,428	+9,3944 +9,8035 +9,8414 +9,2279 +9,6325	9,3736 +9,5352 +9,8812 9,5153 7,8825	+1,2142 ,2142 ,2151 ,2154 ,2156	+9,7609 ,7609 ,7591 ,7584 ,7580	280 284 293 286 287	-,013 +,018 +,007 +,013 +,013	- ,16 - ,10 - ,10 + ,03 - ,12
1866 1867 1868 1869 1870	3 4 4 3	+10 25 4,87 +32 2 17,33 —16 57 5,50 —24 1 45,40 +57 5 36,46	16,438 16,492 16,502 16,532 16,584	+9,7251 +9,8261 +9,3979 +9,2201 +9,8500	+9,1718 +9,6401 9,3798 9,5259 +9,8419	+1,2159 ,2173 ,2175 ,2183 ,2197	+9,7575 ,7546 ,7540 ,7524 ,7494	289 299 296 301 309	+,020 +,012 +,007 +,019 +,004	- ,16 + ,09 - ,22 - ,06 + ,03
1871 1872 1873 1874 1875	4 4 4 3 4	+57 11 59,62 -17 49 54,06 +43 7 36,16 +19 3 38,54 +13 50 14,59	16,584 16,610 16,607 16,620 16,633	+9,8494 +9,3838 +9,8451 +9,7730 +9,7443	+9,8424 -9,4041 +9,7533 +9,4331 +9,2986	+1,2197 ,2204 ,2203 ,2206 ,2210	+9,7494 ,7479 ,7481 ,7474 ,7466	310 307 313 312 316	+,002 +,021 +,022 +,012 +,012	+ ,03 + ,02 - ,04 - ,01 - ,05
1876 1877 1878 1879 1880	3 4 3 4 3	+60 30 34,89 -20 46 55,83 +60 50 57,10 +35 21 24,93 + 1 35 18,29	16,647 16,659 16,727 16,739 16,788	+9,8432 +9,3201 +9,8401 +9,8274 +9,6522	+9,8592 -9,4694 +9,8627 +9,6845 +8,3735	+1,2213 ,2216 ,2234 ,2237 ,2250	+9,7459 ,7451 ,7411 ,7404 ,7375	318 317 328 325 330	+,028 +,012 +,017 +,015 +,008	- ,08 + ,03 + ,04 - ,15 - ,03
1881 1882 1883 1884 1885		-38 31 56,97 +59 33 17,04 -19 58 0,06 +35 22 19,11 +53 13 35,86	16,791 16,788 <b>1</b> 6,819 16,836 16,798	7,0000 +9,8395 +9,3463 +9,8248 +9,8432	-9,7174 +9,8587 -9,4568 +9,6871 +9,8270	+1,2251 ,2250 ,2258 ,2262 ,2252	+ 9,7373 ,7375 ,7355 ,7345 ,7369	329 334 333 337 335	+,029 +,023 +,007 +,004	- ,11 - ,02 - ,13 - ,15 - ,02
1886 1887 1888 1889 1890	3 3 2	+20 27 48,83 +20 22 58,62 +62 57 45,90 +55 50 11,38 - 7 3 18,41	16,854 16,864 16,879 16,882 16,960	+9,7745 +9,7745 +9,8306 +9,8388 +9,5635	+9,4687 +9,4673 +9,8752 +9,8433 —9,0154	+1,2267 ,2269 ,2273 ,2274 ,2294	+9,7334 ,7328 ,7318 ,7316 ,7266	339 342 349 347 350	+,009 +,004 +,037 +,010 +,014	- ,06 - ,10 - ,03 - ,05 - ,04

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No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-		Logari	thms of	
			Obs.	Jan. 1, 1836.	sion.	a	ь	c	d
1891 1892 1893 1894 1895	Aquarii ———————————————————————————————————	8 8 8 7.8 8	3 2 1 2	h. m. s. 21 51 19,10 51 36,63 51 55,66 52 19,33 52 38,73	*. +3,301 3,066 3,409 3,301 2,724	,7521 ,7980 ,7755	-8,5717 ,5487 ,5932 ,5690 ,5921	+0,5186 ,4866 ,5326 ,5186 ,4352	+6,2158 -8,4362
1896 1897 1898 1899 1900	Aquarii Cygni Pegasi Aquarii Cephei	8 7.8 8 8 7.8	1 1 2 3 2	53 18,11 53 25,84 53 42,87 53 47,54 53 53,98	3,091 2,281 2,726 3,436 1,997	+8,7543 8,9317 8,8011 8,8079 9,0174	8,5439 ,7207 ,5890 ,5955 ,8047	+0,4901 ,3581 ,4355 ,5360 ,3004	+8,4440
1901 1902 1903 1904 1905	Pegasi Aquarii ——— Piscis Aust.	7 8 7.8 8.9 8	2 3 3 2 4	53 58,17 54 6,59 55 1,70 55 16,06 56 48,43	3,355 3,237	,7552 ,7906 ,7691	-8,5485 ,5414 ,5728 ,5501 ,5939	+0,4688 ,4%97 ,5257 ,5101 ,5389	-7,2231
1906 1907 1908 1909 1910	Pegasi Aquarii Pegasi Piscis Aust.	8 7 7.8 7.8 7	2 2 3 1 1	57 28,22 57 38,16 58 6,39 58 18,31 59 8,50	3,355 3,016	,7609 ,7956 ,7610	8,53 <b>2</b> 2 ,5319 ,5643 ,5292 ,6060	+0,4780 ,4777 ,5257 ,4794 ,5464	
1911 1912 1913 1914 1915	Lacertæ Aquarii Pegasi	7 7 8 8 7.8	2 1 3	59 12,76 59 29,41 59 38,77 59 49 22 0 3,86	3,403 3,152 2,621	,8095 ,7646 ,8415	8,6706 ,5724 ,5269 ,6032 ,5623	+0,3824 ,5319 ,4986 ,4185 ,4422	7,8597
1916 1917 1918 1919 1920	Aquarii ———— Cephei Lacertæ Cephei	8 7 7 8 7.8	3 2 1 3 2	0 16,53 0 49,47 1 38,66 2 58,35 3 5,50	3,046 2,011 2,472	8,7628 9,0397 8,8965	8,5213 ,5196 ,7935 ,6441 ,7941	,4837 ,3034 ,3930	-6,6407 +7,2947 +8,9684 +8,7253 +8,9776
1921 1922 1923 1924 1925	Aquarii Gruis Cephei Pegasi	8 7 7 6.7 7.8	1 3 2 3 1	3 <b>21,4</b> 9 4 36,11 4 50,36 5 33,06 5 50,75		8,8964 9,1149 8,8480	8,5262 ,6366 ,8545 ,5840 ,5074	+0,5108 ,5623 ,2521 ,4216 ,4729	-8,1938 -8,7230 +9,0661 +8,5935 +7,9526
1926 1927 1928 1929 1930	Aquarii Pegasi Cephei Aquarii	8 7 7.8 7.8 9	3 2 3	5 57,46 6 37,93 7 7,85 7 16,85 7 21,22	3,138 2,793	9,1048	—8,5510 ,5025 ,5356 ,8332 ,5190	+0,5301 ,4966 ,4461 ,2688 ,5149	8,4705 7,8162 +8,4082 +9,0528 8,2811
1931 1932 1933 1934 1935	Cephei Pegasi Lacertæ Pegasi Aquarii	6.7 7.8 8 7.8 8	2 3 3 2 3	8 40,68 9 9,15 9 14,80 10 2,98 10 47,51	1,878 2,733 2,463 2,924 3,168	8,8268	—8,8263 ,5463 ,6358 ,4989 ,4904	+0,2737 ,4366 ,3915 ,4660 ,5008	+9'0517 +8,5038 +8,7606 +8,1406 -7,9870

No.	No. Obs.		Annual Preces-		Logarit	hms of		zzi No.	Annua	P. M.
			sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
1891 1892 1893 1894 1895	3 3 3 2 4	-18 10 3,88 + 0 8 26,99 -25 47 33,26 -18 17 56,69 +26 0 1,91	" +16,977 16,988 17,004 17,023 17,035	+9,3909 +9,6395 +9,2068 +9,3909 +9,7931	-9,4213 +7,3919 -9,5668 9,4256 +9,5715	+1,2298 ,2301 ,2305 ,2310 ,2313	+9,7256 ,7248 ,7238 ,7226 ,7218	352 353 354 356 359	s. +,029 +,016 +,014 +,019 +,017	
1896 1897 1898 1899 1900	4 3 2 3 3	- 1 54 48,53 +48 20 22,68 +26 2 42,56 -27 50 16,89 +56 52 31,96	17,065 17.072 17,083 17,088 17,090	+9,6191 +9,8319 +9,7924 +9,1461 +9,8293	8,4507 +9,8037 +9,5735 9,5997 +9,8539	+ 1,2321 ,2323 ,2326 ,2327 ,2327	+9,7197 ,7193 ,7185 ,7183 ,7181	364 368 369 367 373	+,030 +,010 +,006 +,009 +,026	+ ,06 ,04 ,05 ,06 + ,07
1901 1902 1903 1904 1905	3 3 3 4	+10 11 8,85 — 1 42 21,08 —22 34 12,21 —13 48 29,44 —29 51 55,35	17,094 17,102 17,144 17,156 17,231	+9,7160 +9,6222 +9,3053 +9,4742 +9,0864	+9,1791 -8,3990 -9,5159 -9,3095 -9,6311	+1,2329 ,2530 ,2341 ,2344 ,2363	+9,7177 ,7173 ,7143 ,7135 ,7082	370 371 377 379 384	+,005 +,012 +,016 +,003 +,003	- ,16 + .03 + ,02 ,00 - ,10
1906 1907 1908 1909 1910	4 4 3 3	+ 5 10 15,74 + 5 18 52,62 -23 2 11,24 + 4 23 53,64 -33 55 29,76	17,255 17,261 17,284 17,291 17,329	+9,6794 +9,6803 +9,3032 +9,6739 +8,9031	+8,8908 +8,9033 -9,5279 +8,8224 -9,6832	+1,2369 ,2371 ,2377 ,2378 ,2388	+9,7065 ,7061 ,7044 ,7040 ,7011	390 391 393 395 398	+,012 +,013 -,001 +,006 +,031	- ,13 - ,19 + ,12 - ,12 + ,04
1911 1912 1913 1914 1915	5 3 3 3 5	+44 18 58,77 -26 34 0,41 - 7 10 54,25 +33 43 15,23 +24 13 6,47	17,329 17,343 17,349 17,355 17,367	+9,8202 +9,2148 +9,5670 +9,8055 +9,7789	+9,7812 -9,5874 -9,0324 +9,6822 +9,5510	+1,2388 ,2391 ,2393 ,2394 ,2397	+9,7011 ,7001 ,6996 ,6992 ,6983	404 400 403 409 411	+0,18 -0,18 +0,15 +,008	- ,03 + ,07 - ,05 + ,06 + ,03
1916 1917 1918 1919 1920	4 3 2 4 2	- 0 27 42,54 + 1 56 5,73 +58 2 31,35 +42 23 4,69 +58 29 17,02	17,378 17,404 17,434 17,494 17,496	+9,6335 +9,6532 +9,8122 +9,8122 +9,8082	-7,8167 +8,4705 +9,8681 +9,7697 +9,8717	+1,2400 ,2407 ,2414 ,2429 ,2429	+9,6974 ,6954 ,6932 ,6885 ,6883	412 417 4 8 12	-,001 +,010 +,015 +,004 +,021	- ,19 - ,05 - ,06 + ,07 + ,11
1921 1922 1923 1624 1925	4 3 3 3 3	-15 1 57,76 -42 9 18,03 +63 19 2,44 +33 47 53,38 + 8 40 8,93	17,510 17,564 17,570 17,602 17,617	+9,4669 -7,0000 +9,7959 +9,7966 +9,6998	9,3548 9,7693 -+9,8940 +-9,6891 +-9,1237	+ 1,2433 ,2446 ,2448 ,2455 ,2459	+9,6872 ,6828 ,6824 ,6796 ,6784	7 18 24 29 30	+,016 +,074 +,018 +,018 +,011	- ,16 - ,61 - ,02 - ,10 - ,05
1926 1927 1928 1929 1930	4 4 3 2 3	-26 46 41,63 - 6 23 47,28 +23 30 10,52 +62 28 57,17 -18 1 3,85	17,623 17,648 17,670 17,672 17,678	+9,5786 +9,7679 +9,7910	-9,5974 -8,9896 +9,5465 +9,8933 -9,4354	+1,2461 ,2467 ,2472 ,2473 ,2474	+9,6780 ,6759 ,6740 ,6737 ,6733	25 35 39 42 38		+ ,01 - ,06 + ,05 + ,03 + ,08
1931 1932 1933 1934 1935	3 3 4 2 4	+62 21 2,46 +28 21 26,18 +44 16 26,93 +13 8 1,90 — 9 19 25,97	17,731 17,752 17,754 17,789 17,819	+9,1028 +9,7220	+9,8941 +9,6243 +9,7914 +9,3052 -9,1574	+1,2487 ,2492 ,2493 ,2402 ,2509	+9,6687 ,6668 ,6666 ,6634 ,6607	53 52 55 57 59		+ ,07 + ,01 - ,04 - ,07 - ,09

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Pieces-		Logari	thms of		
<u> </u>				Jan. 1, 1836.	sion.	а	b	c	d	
1936	D:	~	3	h. m. s.	s.	1 9 7077	0.5000	. 0.4550	. 0.0140	
1930	Pegasi	7 7	٥	22 10 56,84	+2,856 2,925	+8,7977	<b>8,5089</b>	4661	+8,3140	
1938	Lacertee	7	2	11 45,32	2,611	,7851 ,8711	,4942		+8,1459	
1939		7	2	12 41,37	2,926	,7863	,5789	,4168	+8,6502	
1940	Pegasi Aquarii	7	2	12 48,76	3,142	,780	,4894 ,4805	,4663 ,4972	+8,1460 -7,8660	
- 1	•	~		•	·			,	· ·	
1941 1942	Pegasi	7 8	2 2	13 9,95	2,986	+8,7792	-8,4798	+0,4751		
1943	A		2	15 17,15 15 27,09	3,009 3,182	8,7793	,4700	,4784	+7,7788	
1944	Aquarii	7.8	3	15 34,92	2,644	8,7853	,4751	,5027		
1945	Lacertse	7.8	3	19 16,69	1,964	8,8685	,5580			
1940	Cephei	7.8	"	19 10,09	1,304	9,1200	,7913	,2931	+9,0689	
1946	Pegasi	7.8	3	19 25,66	3,032	+8,7817	-8,4524	+0,4817		
1947	<del></del>	8	2	20 16,24	2,730	8,8486	,5150	,4360	+8,5607	
1948	Cephei	7	2	20 18,21	1,987	9,1174	,7838	,2982	+9,0654	
1949	Aquarii	8	3	20 24,93	3,172	8,7892	,4545	,5013	-8,0518	
1950	<del></del>	8.9	2	20 39,06	3,172	8,7893	,4536	,5013	<b>—8,0492</b>	
1951	Piscis Aust.	9	3	21 45,66	3,326	+8,8256	8,4843	+0.5219	<b>—8,451</b> 3	
1952		8.9	2	22 11,38	3,429	,8605	,5172	,5352		
1953	Aquarii	8.9	4	22 11,53	3,180	,7920	,4487			
1954	Pegasi	7.8	2	<b>22 2</b> 2,69	3,034	,7843	,4399	4820	+7,5720	
19 <b>5</b> 5	Aquarii	8	3	22 24,66	3,179	,7922	,4475	,5023	8,0894	
1956	Aquarii	8	4	23 24,22	3,208	+8,7982	<b>—8,4488</b>	  +0,5062	<b>-8,1943</b>	
1957		8	3	24 12,34	3,247	,8076	,4541	,5115	-8,3049	
1958		7	4	26 34,65	3,312	,8290	4632	,5201	-8,4520	
1959		9	2	26 58,14	3,278	,8194	,4515	,5156	-8,3886	
1960	Picis Aust.	7.8	3	27 24,49	3,402	,8614	,4914	,5317	<b>-8,5912</b>	
1961	Aquarii	7.8	3	27 51,10	3,278	+8,8206	<b>-8,4481</b>	+0,5156	8,3926	
1962	Lacertæ	8	3	28 10,48	2,651	,8962	,5223	,4234		
1963	pre.	7		28	2,652	,8968	,5208	,4236	+8,6938	
1964	Piscis Aust.	8.9	4	28 59,47	3,346	,8440	,4659	,5245	-8,5197	
1965	Aquarii	8	3	30 46,11	3,107	,7916	,4035	,4923	<b>7,6814</b>	
1966	Aquarii	8	2	32 18,93	3,106	+8,7927	-8,3962	+0,4922	<b>7,6760</b>	
1967	Piscis Aust.	8	3	32 21,90	<b>3,</b> 3 <b>3</b> 3	8,8459	,4491		<b>-8,5187</b>	
1968	Pegasi	8	2	32 45,36	2,947	8,8044	,4056	,4694		
1969	Aquarii	8	3	33 21,81	3,163	8,8002	,3982		<b>-8,</b> 0789	
1970	Cephei	8	2	33 22,35	2,322	9,0511	,6491	,3659	+8,9726	
1971	Aquarii	9	3	33 <b>37,</b> 33	3,105	+8,7937	8,3898	+0,4921		
1972	1	9	3	34 51,40	3,147	,7991	,3885	,4979	8,0052	
1973	-	9	4	36 1,54	3,139	7989	,3820	,4968	-7,9661	
1974		9	4	36 31,85	3,138	,7993	,3793	,4966	<b>—7,9639</b>	
1975	-	8.9	4	37 42,91	3,155	,8028	,3759	,4990		
1976	Pegasi	8	3	37 56,24	2,802	+8,8565	<b>8,4284</b>	+0,4475	+8,5506	
1977	Lacertæ	8	3	39 11,54	2,601	9500	,5150	,4151		
1978	Aquarii	7.8	2	39 24,48	3,109	,9900 ,79×3	,3617	,4926	-7,7443	
1979		9	4	39 30,49	3,240	,8252	3879	,4920		
1980	Piscis Aust.	8	3	40 50,12	3,368	,8772	,4319	,5274		
- 1		•		10 00,12	0,000	,0112	,2018	,02/4	-0,0400	

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No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-	Logarithms of					Annua	P. M.
			sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
1936 1937 1938 1939 1940	3 2 3 4 4	+19 8 45,05 +13 15 0,34 +36 56 52,96 +13 12 42,36 - 7 3 55,81	17,824 17,843 17,853 17,893 17,898	+9,7482 +9,7218 +9,7924 +9,7202 +9,5752	+9,4653 +9,3102 +9,7289 +9,3104 -9,0388	,2515 ,2517	,6585 ,6575	60 62 65 69 68	+,016 +,004 +,008 +,005	- ,08 - ,11 + ,06 - ,01 - ,01
1941 1942 1943 1944 1945	4 4 4 4	+ 7 47 58,66 + 5 42 53,06 -11 1 25,15 +35 49 48,51 +62 44 20,63	17,913 17,995 18,002 18,005 18,146	+9,6911 +9,6776 +9,5340 +9,7846 +9,7612	+9,0848 +8,9527 -9,2339 +9,7211 +9,9057	+1,2532 ,2551 ,2553 ,2554 ,2588	+9,6518 ,6439 ,6431 ,6429 ,6281	73 82 83 87 109	+,010 +,015 +,004 +,018 +,015	- ,15 - ,01 - ,10 ,00 + ,03
1946 1947 1948 1949 1950	4 2 3 2 3	+ 3 41 22,47 +31 0 16,66 +62 29 44,43 -10 34 20,81 -10 29 56,06	18,150 18,183 18,182 18,190 18,197	+9,6628 +9,7701 +9,7581 +9,5428 +9,5453	+8,7667 +9,6697 +9,9055 9,2205 9,2180	+1,2589 ,2597 ,2597 ,2598 ,2600	+9,6276 ,6240 ,6240 ,6232 ,6224	106 113 115 110 114	+,011 +,014 +,002 +,014 +,015	- ,02 - ,04 + ,05 - ,15 - ,08
1951 1952 1953 1954 1955	3 2 4 4 3	-25 0 22,75 -33 11 30,57 -11 27 48,14 + 3 29 42,77 -11 26 37,57	18,239 18,253 18,253 18,260 18,262	+9,3385 +9,1367 +9,5353 +9,6609 +9,5353	9,5847 9,6974 9,2572 +8,7473 9,2567	+1,2610 ,2613 ,2613 ,2616	+9,6177 ,6161 ,6161 ,6152 ,6149	1 19 124 125 127 126	+,010 +,039 +,012 +,007 +,003	- ,07 + ,02 - ,01 - ,08 - ,08
1956 1957 1958 1959 1960	5 3 4 2	-14 26 5,83 -18 20 26,43 -24 50 12,50 -21 46 47,23 -32 29 16,05	18,297 18,325 18,409 18,423 18,436	+9,5024 +9,4548 +9,3579 +9,4099 +9,1931	-9,3565 -9,4584 -9,5860 -9,5325 -9,6935	+1,2624 ,2630 ,2650 ,2653 ,2657	+9,6110 ,6076 ,5972 ,5954 ,5937	133 138 146 148 154	+,007 +,003 +,007 +,015 -,002	- ,01 + ,03 - ,11 - ,04 + ,01
1961 1962 1963 1964 1965	4 2 1 4 3	-21 56 14,58 +38 44 19,23 +38 46 51,87 -28 17 33,19 - 4 27 27,57	18,452 18,461 18,475 18,488 18,551	+9,4082 +9,7649 +9,7642 +9,2988 +9,6064	-9,5361 +9,7608 +9,7616 -9,6405 -8,8562	+1,2660 ,2663 ,2666 ,2669 ,2684	+9,5916 ,5904 ,5886 ,5868 ,5782	155 159 163 162 171	+,014 +,041 +,056 +,014	+ ,06 - ,12 - ,26 - ,01 - ,09
1966 1967 1968 1969 1970	5   4   1   2   3	- 4 24 20,84 -28 6 33,99 +13 41 21,39 -10 58 50,30 +56 32 9,01	18,601 18,603 18,614 18,634 18,634	+9,6064 +9,3181 +9,7067 +9,5514 +9,7372	-8,8508 -9,6404 +9,3428 -9,2470 +9,8900	+1,2695 ,2696 ,2698 ,2703 ,2703	+9,5711 ,5707 ,5692 ,5663 ,5663	183 182 186 188 194	+,008 +,002 +,032 +,012 +,043	- ,12 + ,03 - ,02 - ,07 + ,14
1971 1972 1973 1974 1975	3 4 4 4 3	- 4 19 40,33 - 9 16 26,40 - 8 28 30,16 - 8 25 28,09 -10 33 22,24	18,644 18,683 18,718 18,735 18,772	+9,6085 +9,5682 +9,5763 +9,5763 +9,5587	8,8435 9,1756 9,1375 9,1353 9,2828	+1,2705 ,2714 ,2723 ,2726 ,2735	+9,5647 ,5589 ,5533 ,5507 ,5447	191 204 206 208 213	+,017 +,008 +,008 +,018 +,010	- ,27 + ,01 - ,03 + ,04 - ,23
1976 1977 1978 1979 1980	4 3 2 4 3	+29 35 49,40 +45 21 12,67 — 5 5 35,50 —20 33 33,30 —33 40 8,50	18,777 18,814 18,821 18,826 15,867	+9,7405 +9,7404 +9,6042 +9,4564 +9,2405	+9,6658 +9,8250 8,9187 9,5178 9,7171	+1,2736 ,2745 ,2747 ,2748 ,2757	+9,5436 ,5375 ,5361 ,5354 ,5285	214 222 220 221 224	,011 +,021 +,018 +,002 +,019	,45 ,11 ,24 ,18 + , <b>0</b> 7

No.	Star's name and l	Mag.	No. Obs.		Righ cen	nt sion	Annual Preces-	Logarithms of			
			008.	Jan.	1, 1	1836.	sion.	a	<i>b</i>	c	d
		0.0		h.	m.	s.	\$.	. 0 0007	0.0507	4060	7 0600
1981	Aquarii	8.9	3	22		40,78 12,66	+3,133 3,048	+8,8027 ,8003	8,3527 ,3348	+0,4960 ,4840	-7,9622 +7,4734
1982 1983	Pegasi	· <b>8</b>	5			14,73	3,109	,8025	,3304	,4926	<b>—7,7841</b>
1984	Aquarii	9	4		50	1,27	3,106	,8054	,3023	4922	
1985	Andromedæ	8	3		50	2,84	2,749	,9101	,4075	,4392	+8,7046
1986	Damai	7.8	1		50	26,81	3,093	+8,8065	8,301 <b>2</b>	+0,4804	+7,8592
1987	Pegasi Cephei	8	4			52,83	-0,667	9,7798		-9,8241	+9,7774
1988	Aquarii	8	2	i		22,16		8,8049	8,2934		
1989	21448.11	7.8	l ī	1	51	31,33	3,268	8,8544		0,6143	
1990	Pegasi	7.8	4			31,41		8,8071	8,2,43	0,4804	+7,8610
1991	Pegasi	8	5		51	49,82	3,023	+8,8073	8,2927	+0,4804	+7,8634
1992	Andromedæ	8	l ĭ	1	52	6,26	2,580	9,0100	,4936	,4116	
1993	Aquarii	8	2			33,33		8,8431	,3230	,5101	-8,4464
1994	Pegasi	8	4	i		27,80		8,8218	,2892	,4720	+8,2450
1995		8	4		<b>58</b>	9,52	2,955	8,8289	,2695	,4706	+8,3107
1996	Pegasi	8	4		58	23,99	2,946	+8,8326	  8,2711	+0,4692	+8,3463
1997		8.9	4			54,45		,8154	,2424	.4953	<b>—8,0500</b>
1998		8	4	l		58,86		,8663	,2934	4591	+8,5494
1999		8.9	3	<b>23</b>	2	24,63		8154	<b>,2</b> 234	,4794	+8,0057
2000	Piscium	7.8	2		2	54,11	3,045	,8115	,2152		+7,6693
2001	Aquarii	8.9	3	ì	3	55,63	3,062	+8,8110	_8,2067	+0,4860	+7,1135
2002		7.8	4	İ	4	25,70	3,127	,8183	,2102	,4951	
2003		8.9		1	5		3,033		,1999	,4819	+7,8544
2004		7.8			5	18,49			,1959	,4859	+7,1838
2005	Aquarii	8	2		5	42,62	3,243	,8713	,2522	,5109	-8,5614
2006		7.8				51,69		+ 8,8355	-8,2153		+8,3430
2007		8	j 4	1	7	15,03	3,066			,4866	+6,6911
2008		8	2		7					,5103	<b>-8,5662</b>
2009		8 8	3 3	1	8				,1952		
2010	,	0	"		10	13,41	2,324	,8627	,2048	,4000	+8,5155
2011		7.8		1		27,47	2,924		-8,2026		+8,5159
2012		9	3	1		28,73		,8275	,1672		-8,2207
2013		8	2 2	1		29,61				,4837	+7,7146
2014		7		İ		35,41				,4698	+8,4410
2015	5 Andromedæ	7.8	3		12	13,66	2,830	,9359	,2597	,4518	+8,7518
2016		7.8				55,09					
2017		8.9			14	28,43	3,122	,8944	,1263	,4944	-8,1296
2018		8	4		16						+7,7847
2019		9 8	3 5			38,26 47,52				,4719	+8,4355 -8,2079
}	•			1		•			i	ı	I
202		8.9 8.9				7 53,06 3 54,29				+0,5005	$\begin{bmatrix} -8,4245 \\ -8,2072 \end{bmatrix}$
202	3 Piscium	8.9	)   3		19	55,57	7 3,047	.8191	,0639	4839	+7,7764
202	4	8	3 4			11,88				.4840	+7,7796
202	5 Gruis					41,68		,9528			) —8,7855

No.	No.	Declination Jan. 1, 1836.	Annual Preces-		Logarith	ms of		zi No.	Annus	d P. M.
	Obs.		sion.	a'	b'	c'	d'	Piazzi	A. R.	Decn.
1981 1982 1983 1984 1985	4 4 3 4	- 8 19 28,87 + 2 41 0,03 - 5 31 40,98 - 5 22 43,20 + 38 30 48,24	# 18,890   18,962   18,993   19,922   19,121	+9,5809 +9,6513 +9,6042 +9,6064 +9,7210	-9,1337 +8,6490 -8,9582 -8,9492 +9,7740	,2779 ,2786 ,2815	,5104 ,5045 ,4765	228 237 242 259 260	+,012 +,018 +,029 +,014 -,006	+ ,13 - ,13 - ,04 - ,09 + ,02
1986 1987 1988 1989 1990	2 3 3 1 5	$\begin{array}{c} + 6 & 28 & 3,51 \\ +83 & 54 & 21,26 \\ - 3 & 19 & 1,64 \\ -27 & 0 & 37,68 \\ + 6 & 28 & 51,47 \end{array}$	19,132 19,138 19,155 19,160 19,160	+9,6665 +9,5331 +9,6191 +9,4048 +9,6674	+9,0325 +9,9776 8,7405 9,6372 +9,0343	,2819 ,2823 ,2824	+9,4745 ,4729 ,4688 ,4676 ,4676	263 280 269 270 271	+,008 ,000 +,010 +,023 +,012	- ,08 + ,03 - ,01 - ,17 - ,08
1991 1992 1993 1994 1995	3 3 4 4	+ 6 30 22,88 +51 25 35,35 -23 40 3,80 +15 21 3,11 +17 37 51,53	19,168 19,174 19,188 19,233 19,322	÷9,6674 +9,6972 +9,4487 +9,6928 +9,6937	+9,0367 +9,8740 -9,5844 +9,4053 +9,4658	+1,2826 ,2827 ,2830 ,2840 ,2860	+9,4659 ,4643 ,4609 ,4495 ,4246	273 276 277 283 300	+,009 +,006 +,029 +,013 +,024	- ,01 + ,09 + ,03 - ,16 + ,05
1996	4	+19 1 34,83	19,328	+9,6955	+9,4980	+ 1,2862	+9,4228	301	+,029	- ,02
1997	4	- 9 53 43,97	19,363	+9,5832	-9,2196	,2870	,4120	307	+,018	- ,20
1998	3	+28 48 24,85	19,363	+9,7024	+9,6681	,2870	,4120	309	+,008	+ ,17
1999	3	+ 8 53 34,80	19,418	+9,6693	+9,1765	,2882	,3942	3	+,019	+ ,01
200 <b>0</b>	4	+ 4 6 53,92	19,430	+9,6532	+8,8443	,2882	,3902	5	+,005	- ,06
2001	3	+ 1 7 29,26	19,451	+9,6425	+8,2895	+1,2889	+9,3827	10	+,021	- ,04
2002	4	-10 27 39,54	19,461	+9,5843	-9,2451	,2892	,3791	15	+,012	- ,02
2003	4	+ 6 17 26,00	19,477	+9,6599	+3,0279	,2895	,3734	13	+,020	+ ,03
2004	4	+ 1 18 41,17	19,480	+9,6425	+8,3598	,2896	,3718	15	+,005	+ ,03
2005	4	-29 20 58,14	19,488	+9,4216	-9,6779	,2898	,3687	16	+,019	+ ,03
2006	4	+18 44 35,39	19,491	+9,6866	+9,4953	+1,2898	+9,3677	20	+,008	- ,01
2007	4	+ 0 24 59,18	19,519	+9,6385	+7,8672	,2905	,3564	21	+,014	- ,22
2008	4	-29 34 39,58	19,531	+9,4249	-9,6818	,2907	,3515	25	+,033	- ,19
2009	4	+17 22 0,53	19,533	+9,6821	+9,4641	,2907	,3510	27	+,019	- ,04
2010	4	+26 42 26,09	19,675	+9,6857	+9,6426	,2917	,3319	38	+,014	- ,03
2011	5	+26 42 42,69	19,581	+9,6858	+9,6429	+1,2918	+9,3296	44	,000	- ,01
2012	2	-14 20 47,42	19,581	+9,5647	-9,3830	,2918	,3296	41	+,045	- ,06
2013	2	+ 4 30 50,01	19,581	+9,6532	+8,8893	,2918	,3296	43	+,063	- ,26
2014	2	+22 55 51,44	19,601	+9,6830	+9,5813	,2923	,3197	48	+,015	- ,09
2015	3	+40 51 31,24	19,612	+9,6656	+9,8065	,2925	,3143	54	+,016	+ ,03
2016	4 4 4 3 4	+25 42 52,96	19,643	+9,6794	+9,6289	+ 1,2932	+9,2984	60	+,006	- ,06
2017		-11 40 26,48	19,653	+9,5866	-9,2967	,2934	,2934	64	+,031	+ ,21
2018		+ 5 17 8,41	19,679	+9,6532	+8,9589	,2940	,2780	72	+,013	- ,02
2019		+22 34 50,14	19,688	+9,6739	+9,5769	,2942	,2727	74	+,013	+ ,07
2020		-13 51 1,80	19,707	+9,5775	-9,3712	,2946	,2606	79	+,015	+ ,07
2021	4 · 3 · 5 · 3 · 4	-22 5 28,88	19,710	+9,5237	-9,5675	+1,2947	+9,2593	80	+,007	- ,09
2022		-13 49 45,35	19,725	+9,5786	-9.3706	, <b>2</b> 950	,2489	85	+,00°	+ ,03
2023		+ 5 10 20,83	19,741	+9,6513	+8,9507	,2454	,258	93	+,01°	- ,19
2024		+ 5 11 58,52	19,760	+9,6513	+8,9539	,2958	,2253	98	+,02°	- ,43
2025		-42 53 14,13	19,767	+9,3117	-9,8267	, <b>2</b> 959	,2191	99	+,020	- ,02

No.	Star's name and	Mag.	No. Obs.	Right Ascension	Annual Preces-	1		hms of	of	
	·	J		Jan 1, 1836.	sion.	a	ь	С	d	
				h. m. s,	8.			1	1.000	
2026	Andromedæ	8	5	23 23 55,97	+2,873	+8,9559	<b>8,1539</b>	+0,4583		
2027	Pegasi	8.9	4	24 25,78	2,947	<b>,88</b> 37	8,0760	,4694	+8,590	
2028	Piscium	8.9	4	<b>26</b> 0,53	3,064	,8192	7,9911	,4863		
2029	Aquarii	8	4	<b>2</b> 6 <b>3</b> 6,24	3,097	,8242	7,9882	,4909	<b>-7,997</b>	
<b>2Q</b> 30		8.9	3	27 19,19	3,090	`,8225	7,9766	,4900	<b>7,885</b>	
2031	Ceti	8	3	28 4,17	3,159	+8,8665	<b>—8,010</b> 6		<b>8,</b> 510	
2032	Piscium	8	4	29 26,10	3,060	,8205	7,9448	,4857		
2033	Aquarii	7	4	29 31,31	3,118	,8372	7,9605		[-8,276]	
2034	Andromedæ	8	4	30 3,21	2,911	,9 <i>5</i> 05	8,0660		[+8,777]	
2035	Piacium	. 8	5	31 56,04	3,057	,8217	7,9088	,4853	+7,656	
<b>20</b> 36	Piscium	8	2	33 26,90	3,086	+8,8242	<b>7,8864</b>	+0,4894	<b>7,</b> 901	
2037	Aquarii	8	4	34 20,24	3,100	,8311	,8787	,4914	-8,156	
<b>2</b> 038	Piscium	8	2	35 54,68	3,068	,8215	,8407	,4869	[-6,285]	
<b>2032</b>	App. Sculp.	7.8	4	35 56,58	3,139	,8721	,8913	,4968	-8,530	
<b>204</b> 0	Aquarii	8.9	2	36 15,39		,8274	,8417	,4901	<b>8,0</b> 37	
2041	Andromedæ	8	3	36 35,71	2,931	+8,9750	<b>7,9818</b>	+0,4670	+8,827	
2042		8.9	3	36 53,38	3,103	,8359	,8364	,4918		
2043		8	4	37 31,77	3,101	,8356	,8231	,4915		
2044	Piscium	8.9	3	37 36,53	3,069	,8219	,8094			
2045		8	- 3	37 50,50	3,101	,8355	,8190	,4915	8,226	
<b>20</b> 46	Piscium	7.8	4	38 10,99	3,069	+8,8220	<b>7,797</b> 5	+0,4870	<b>-6,607</b>	
2047		8.9	3	38 55,63	3,120	8,8586			-8,453	
2048		8	5	40 56,59	3,113	8,8568	7,7733	4932	-8,439	
2049		8.9	5	41 29,48	3,097	8,8380	7,7404	4909	-8,257	
2050		8	3	41 54,49	2,875	9,1414	8,0357		+9,084	
2051	Aquarii	8	2	41 59,69	3,096	+8,8387	<b>—7,7297</b>	+0,4908	-8,264	
2052		8.9	3	44 36,59		,8310	,6533		+8,112	
2053		8	3	44 37,85	3,051	,8311	,6514	,4844	+8,113	
2054		7.8	3	44 41,89	3,004	.9154	.7338	4777	+8,685	
2055	Piscium	8.9	3	44 49,07	3,062	,8242	,6407	,4860	+7,695	
2056	Pegasi	8	4	45 34,02	3,052	+8,8313	7,6 <b>9</b> 40	+0,4846	+8,118	
2057		8	3	47 11,25	3,065	8,8237		,4864		
2058		8.9	5	48 3,60		8,8876	,5972		-8,591	
2059	Pegasi	7.8	2	48 20,75		8,8554	,5550	,4830		
2060		7.8	2	48 42,01			,7510	,4736	+8,977	
2061	Pegasi	8	3	49 23,53	3,057	+8,8309	7,4881	+0,4853	+8,094	
2062		9	2	49 45,07			,4680	.4876	<b>—7,753</b>	
2063		7.8	2	52 1,27			3947	4839	+8,512	
2064			5	56 19,45			,0921	,4849	1 + 8,649	
<b>206</b> 5		9	4	56 31,28			,3429	,4812	+9,133	
2066	Ceti	8.9	3	57 6,65	8,071	+8,8312	6,9077	+0,4873	<b>-8,</b> 180	
									1	

No.	No. Obs.	Declination Jan. 1, 1836.	Annual Preces-		Logarit	hms of		zzi No.	Annual	P. M.
	O US.	·	sion.	a'	b'	c'	<b>d</b> ′	Piazzi	A. R.	Decn.
2026 2027 2028 2029 2030	5 4 4 4 4	+43 10 4,80 +30 32 23,56 + 1 5 52,89 - 8 34 57,86 - 6 39 16,61	" +19,798 19,805 19,826 19,834 19,843	+9,6263 +9,6551 +9,6405 +9,6107 +9,6180	+9,8301 +9,7011 +8,2850 -9,1685 -9,0583	,2968 ,2972 ,2974	,1871 ,1672 ,1594	110 113 119 123 129	+,014 +,028 +,026 +,010 -,011	+ ,03 + ,01 - ,06 - ,13 + ,03
2031 2032 2033 2034 2035	4 4 4 4	-26 8 45,39 + 2 27 52,64 -15 59 51,61 +42 10 17,83 + 3 53 50,17	19,851 19,867 19,869 19,874 19,895	+9,5172 +9,6434 +9,5809 +9,6107 +9,6444	-9,6395 +8,6330 -9,4357 +9,8235 +8,8312	+1,2978 ,2981 ,2982 ,2983 ,2987	+9,1399 ,1204 ,1195 ,1118 ,0838	131 136 137 141 147	+,024 -,001 -,002 +,035 +,014	+ ,06 ,00 - ,20 + ,06 - ,06
2036 2037 2038 2039 2040	3 4 4 4 4	- 6 53 21,81 -12 14 12,15 - 0 11 49,39 -27 9 20,19 - 9 22 20,00	19,911 19,9 <b>2</b> 0 19,935 19,935 19,937	+9,6201 +9,6031 +9,6375 +9,5302 +9,6138	-9,0747 -9,3223 -7,4614 -9,6564 -9,2077	+1,2991 ,2993 ,2996 ,2996 ,2997	+9,0594 ,0449 ,0168 ,0168 ,0120	157 161 168 167 169	+,007 +,005 +,005 +,003 +,034	- ,10 - ,10 - ,26 - ,04 - ,11
2041 2042 2043 2044 2045	4 3 3 2	+45 21 16,31 -14 35 33,56 -14 21 50,55 - 0 38 47,04 -14 16 28,97	19,940 19,945 19,950 19,950 19,951	+9,5763 +9,5966 +9,5977 +9,6365 +9,5988	+9,8500 -9,3984 -9,3916 -8,0299 -9,3892	+1,2997 ,2998 ,2999 ,2999 ,3000	+9,0046 8,9983 8,9855 8,9855 8,9816	172 174 178 179 180	+,015 +,013 +,007 +,006 +,004	,08 ,15 + ,01 ,14 ,14
2046 2047 2048 2049 2050	4 3 4 4 4	- 0 22 47,61 -23 10 52,34 -22 31 30,02 -15 14 52,89 +61 18 12,02	19,954 19,960 19,976 19,980 19,982	+9,6375 +9,5596 +9,5682 +9,5999 +9,4425	-7,7840 -9,5927 -9,5814 -9,4177 +9,9418	+1,3000 ,3002 ,3005 ,3006 ,3006	+8,9736 ,9587 ,9150 ,9010 ,8978	183 186 194 199 202	,009 +,002 +,008 +,018 +,015	- ,09 - ,03 + ,04 - ,15 + ,10
2051 2052 2053 2054 2055	4 4 4 4 4	-15 29 32,25 +11 0 55,09 +11 0 51,10 +36 2 47,53 + 4 14 43,47	19,983 19,999 20,000 20,000 20,001	+9,5999 +9,6415 +9,6415 +9,5899 +9,6415	-9,4247 +9,2809 +9,2809 +9,7690 +8,8706	+1,3007 ,3010 ,3010 ,3010 ,3010	+8,8898 ,8213 ,8194 ,8175 ,8156	201 216 217 220 221	+,010 +,005 +,011 -,004 ,000	- ,10 + ,11 + ,14 - ,11 - ,04
2056 2057 2058 2059 2060	4 4 4 4	+11 5 22,41 + 2 36 7,56 -30 25 19,24 +21 44 11,83 +54 55 35,31	20,006 20,013 20,017 20,018 20,020	+9,6415 +9,6385 +9,5416 +9,6243 +9,4594	+9,2843 +8,6616 -9,7036 +9,5683 +9,9126	+1,3011 ,3013 ,3014 ,3014 ,3015	+8,7918 ,7400 ,7090 ,6991 ,6863	224 230 234 235 236	+,014 -,002 +,039 +,001 +,016	+ ,16 - ,26 - ,18 + ,09 - ,03
2061 2062 2063 2064 2065	4 4 4 4	+10 33 41,17 - 4 53 37,74 +26 0 28,52 +33 44 31,88 +63 52 3,55	20,023 20,025 20,033 20,041 20,041	+9,6375 +9,6314 +9,6075 +9,5682 +9,3096	+9,2636 -8,9282 +9,6421 +9,7449 +9,9532	+1,3015 ,3015 ,3017 ,3019 ,3019	+ 8,6567 ,6426 ,5243 ,1880 ,1627	238 241 251 267 269	+,009 +,011 +,006 +,071 +,021	- ,18 - ,14 - ,01 + ,03 + ,03
2066	4	—1 <b>0</b> 31 <b>40,</b> 98	20,042	+9,6284	9,2606	+1,3019	+ 8,0765	273	+,024	- ,12

## Supplementary Catalogue

In addition to the foregoing catalogue—in the years 1836-1837, the places of several \ Stars—whose names only occur in Vols. II and III—have been determined;—and several more—where the result of one observation only had been given, or where discordance among several observations had, occurred or where a large proper motion was observed;—in all these cases, a re-examination of former results has been instituted, and further observations (when necessary) made, as follows.

## SUPPLEMENTARY CATALOGUE OF THE A. R. OF THE FIXED STARS.

Reference.	Names.		R. Jan. 1, —from	Concluded Mean A. R.	Ana	ual	Remarks.
No. Vol.		former obs.	present obs.	Jan. 1, 1836.	Precesn.	Р. М.	
2 of II 2 . III 5 . III 21 . II 41 . II	11 Cassiopeæ 61 Andromed. 96 Piscium Tucanæ 15 Cassiopæ	3 = 1,22 $3 = 58,10$	s. 3=28,59 3= 1,17 1=57,90 3=29,38 3=44,50	h. m. s. 0 0 28,32 5 1,20 8 58,05 11 23 44,31	8. +3,069 3,090 3,075 2,920 3,324	+0,081 -,007 -,010 +,027	give the place of this star 23'46s: Can the pro-
44 . II 45 . II 46 . II 51 . II 27 . III	Tucanæ 6 Hiscium 117 Andromed.	3= 0,36	2=59,83 2= 0,54 2=13,53 1= 8,02 3=30,10	23 59,58 24 0,43 25 13,67 27 7,87 28 29,99	2,786 2,786 2,771 3,064 3,139	+ ,008 + ,014	m s
55 . II 56 . II 31 . III 66 . II	Ceti Piscium 128 Andromed, Ceti Cephei	4=55,00- 5= 4,16 1=55,28 5=30,66 4=37,24	3=55,01 2= 4,16 3=55,02 1=30,73 3=38,14	28 55,00 29 4,16 32 55,09 34 30,67 47 37,63	2,988 3,074 3,150 2,991 6,468	+ ,110 + ,019 + ,027 + ,007 + ,197	These results appear discordant: but from the
96 . 1I 108 . II 67 . III 69 . III 109 . II	38 Andromed. 74 Piscium μ Cassiopeæ 190 Piscium† 27 Ceti		1=27,71 1=54,08 2=24,87 1=20,32 1=24,35	48 27,89 56 54,27 57 24,87 57 20,53 57 24,37	3,183 3,191 3,526 3,092 3,005	+ ,015 - ,003 + ,403   + ,006   + ,011	Piazzi says—the P. M. =+ 5,70
110 . II 112 . II 81 . III 123 . II 132 . II	28 Ceti Phœnicis 181 Andromed. Phœnicis Piscium	1 = 1,95 $2 = 28,35$	2=51,73 3=45,16 2= 1,73 2=28,55 1=10,32	57 51,62 58 45,35 1 1 1,80 1 28,45 5 10,28	3,005 2,698 3,377 2,542 3,112	+ ,004 - ,006 + ,013	
91 . III 135 . II 97 . III 98 . III 147 . II	b Ceti 88 Piscium  p Cassiopeæ 119 ——— 37 ———	3= 8,59 6=11,00 3=48,94 2=12,98 9= 9,02	3= 8,53 1=10,99 1=49,25 2=14,97 4= 9,16	6 8,56 6 11,00 9 49,02 10 14,97 15 9,06	3,009 3,108 3,696 3,890 3,790	+ ,017 + ,009 + ,008 + ,087 - ,016	The star observed in 1835 was Piazzi No. 39— Differs—1,42s. from A. S. C.
102 . III 158 . II 161 . II 164 . II 167 . II	Ceti -	3=14,41 5=47,59 6=14,34 5=58,05 5=24,99	1=14,71 2=47,55 2=14,27 3=57,73 3=24,95	15 14,48 19 47,58 21 14,32 21 57,93 24 24,97	3,096 3,124 2,619 2,836 2,497	+ ,005 + ,006 + ,017	

<sup>•</sup> This may arise from a variation of the proper motion having taken place.

Reference.	Names.		R. Jan. 1, —from	Concluded Mean A. R.	Ann	nual	Remarks.
No. Vol.		former obs.	present obs.	Jan. 1, 1836.	Precesn.	Р. М.	
170 of II 176 . II 178 . II 133 . III 135 . III	1001 Piscium 51 Andromed. Rs 102 Piscium # g Cassiopeæ 49 Mach. Elect.	5= 9,60 6=57,82 10=24,86 3=21,09 2= 8,16	3= 9,60 1=57,92 2=24,93 3=20,59 2= 8,35	h. m. s. 1 26 9,60 27 57,84 28 24,87 30 20,84 31 8,25	s. +3,169 3,617 3,168 4,468 2,817	*** + ,010 + ,017 + ,004 + ,044 + ,021	N. P. D. 20,13
138 . III 146 . 1II 194 . II 167 . III 170 . III	137 Cassiopeæ e Rangifer. 53 Ceti x <sup>2</sup> 147 Cassiopeæ 150 ———	1=17,86 3=39,92 6=32,12 2=57,26 1= 4,46	3=17,83 4=40,53 6=31,97 2=57,53 3= 5,43	32 17,84 38 40,27 41 32,04 48 57,39 50 5,19	3,960 5,572 2,952 5,624 5,435	+ ,032 + ,105 + ,005 + ,088 + ,020	N. P. D. 14,42 ∴ diff=3,6 of arc.
280 . II 181 . III 201 . III 205 . III 209 . III	57 Andromed. $\gamma$ 37 Arietis  b Andromed.  262 — Mach. Elect. $\beta$	3=21,75 1=58,23 2=16,29	2=51,92 3=21,89 3=58,14 2=16,49 1=41,26	53 51,70 54 21,82 2 2 58,16 4 16,39 5 41,11	3,630 3,369 3,717 3,835 2,641	+ ,012 + ,015 + ,009 - ,024 + ,005	
211 . III 217 . III 224 . III 243 . II 249 . II	62 Arietis 41 Persei 265 Andromed. 68 Ceti o 24 Arietis   § 1	1=23,59 1= 8,99 6= 4,18 5= 2,17	1=23,57 1=46,09 1= 9,50 6= 4,26 1= 2,27	6 23,58 7 46,09 10 9,25 11 4,22 16 2,19	3,395 4,141 3,908 3,021 3,197	+ ,020 + ,009 + ,018 + ,012 + ,008	·
253 . II 238 . III 256 . II 248 . III 251 . III	12 Trianguli c 46 Messoris Eridani c Ceti 46 Trianguli	5=34,38 4=13,35 8=58,36  4=50,77	3=34,30 4=14,24 3=58,43 4=16,53 3=51,94	18 34,35 19 13,80 20 58,38 23 16,53 25 51,94	3,487 5,236 2,199 2,846 3,604	+ ,005 + ,027 - ,001 + ,034	N. P. D. 19,27.  A wrong star observed in 1835.
268 . II 253 . III 256 . III 279 . II 283 . II	Ceti 418 ——— 34 Arietis μ	5= 5,87 2= 7,08 4=37,66 5= 8,14	5= 5,97 1= 6,86 4=18,74 5=37,07 3= 8,07	27 5,92 27 7,01 29 18,74 31 37,40 33 8,12	3,153 3,009 3,167 3,145 3,357	+ ,130 - ,005 + ,021 - ,010 + ,023	the mean is erroneously stated to be 37,83s. in Vol. II.
295 . II 306 . II 286 . III 324 . II 325 . II	Hydræ Fornacis β 98 Persei Horologii β Eridani θ <sup>1</sup>	5=13,72 3=13,60 5= 2,76	4= 6,06 1=13,77 3=13,27  2= 2,47	37 6,06 42 13,73 49 13,43 51 — 52 2,68	0,868 2,502 4,208 1,222 2,277	+ ,009 + ,005 - ,008	differs 12s. from A. S. C.
337 . II 340 . II 346 . II 356 . II 317 . III	Fornacis Persei Arietis 14 Eridani 140 Persei	6=16,45 5=43,73 5=39,45 1=28,96	3=16,40 4=43,80 3=39,20 4=29,20	55 — 57 16,43 3 0 43,76 8 39,36 10 29,15	2,663 4,138 3,535 2,899 3,981	+ ,146 + ,019 + ,002	Not now visible. ! differs 4, 28s from A. S. C.
318 . III 321 . III 329 . III 331 . III 332 . III	63 Cuss. Mess. 142 Persei  15 Tauri 16 ———	3=30,92 3=20,25 3= 1,05 3=27,48 6=30,90	3=31,33 3=38,38 2= 1,36 3=27,95 2=31,09	10 31,12 11 38,38 20 1,17 20 27,71 20 30,97	5,095 4,195 4,179 3,366 3,116	+ ,018 + ,018 + ,010 + ,006 + ,005	A wrong star observed in 1836.  Solution Former observations discordant: 27, 8s. is probably nearer the truth than the mean.
333 . III 337 . III 341 . III 399 . II 358 . III	Persei 149 Eridani Persei 41 — v Fornacis	3=35,11 3= 4,93 4=21,19 9= 4,68 3=43,89	4=35,12 3= 5,27 3=20,97 3= 4,77 3=43,80	20 35,11 22 5,10 27 21,10 34 4,70 35 43,84	4,187 2,056 3,690 4.035 2,381	+ ,004 ,001 ,003 + ,019 ,002	

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## SUPPLEMENTARY CATALOGUE

Reference.	Names.		R. Jan. 1, .—from	Concluded Mean A. R.	Anı	nual	Remarks.
No. Vol.		former obs	present obs.	Jan. 1, 1836.	Precesn.	P. M.	
363 of III 365 . III 369 . III 373 . III 424 . II	27 Psalt. Georg. 12 Pleiadum 118 Tauri 132 —— 28 Eridani	4= 1=14,19 5=36,75	8. 4=33,75 4=37,00 2=28,75 2=14,47 8=36,82	h. m. s. 3 36 33,75 37 37,00 39 28,75 40 14,38 40 36,80	8. +3,053 3,543 3,541 3,504 2,571	+ ,007 + ,017 + ,016 + ,011 - ,033	A wrong star observed in 1835.
374 . III 378 . III 380 . III 445 . II 403 . III	Fornacis 206 Eridani H Camelop. 35 Eridani 171 Tauri	6=13,76 •3= 4,41	2=42,07 2=39,60 3= 1,35 1=13,49 3= 4,38	40 42,07 41 39,60 43 1,35 53 13,72 55 4,40	2,436 2,251 5,200 3,028 3,224	+ ,006 + ,002 + ,015 + ,001 + ,022	The place of this star as given in Vol. III. is er-
455 . II 454 . II 421 . III 432 . III 433 . III	Reticuli Tauri 205 ——— o' Eridani Z ———	8=32,79 6=36,42 2=45,54 1= 4,47	3=32,82 1=36,45 1=45,15 3=51,35 3= 4,44	58 2,80 58 36,43 4 6 45,41 12 51,35 13 4,45	0,841 3,418 3,188 2,501 3,058	+ ,007 - ,005 + ,008 - ,002	Piazzi properly places this star in the constella- tion Taurus.
436 . III 500 . II 503 . II 508 . II 445 . III	220 Persei Reticuli 71 Tauri 75 ———— 265 ————	*3= 0,43 4=51,29 4= 0,62 5= 4,29 1= -	4= 0,44 3=51,65 3= 0,54 1= 4,41 4=11,00	14 0,44 15 51,45 17 0,59 19 4,31 21 11,00	3,858 0,643 3,395 3,414 3,388	+ ,019 + ,025 + ,001 + ,013	
447 . III 529 . II 463 . III 465 . III 467 . III	269 Tauri 88 ———————————————————————————————————	4=38,88 3=58,03	4=24.32 1=39,08 3=29,77 1=57,56 3=39,67	21 24,32 26 38,92 27 29,77 28 57,92 30 39,67	3,412 3,280 2,393 2,877 6,502	+ ,020 + ,007 - ,001 - ,005 + ,036	
555 . 11 499 . 111 577 . 11 515 . 111 518 . 111	96 Tauri F 52 Camelop. 10 — d Eridani 61 Camelop.	3 = 4,30	2=21,66 4= 4,75 2=52,29 3=40,41 3=57,83	40 21,56 44 4,56 48 51,71 51 40,41 51 57,77	3,419 7,429 5,286 2,829 5,176	+ ,014 - ,018 + ,005 + ,003 + ,010	
523 . III 530 . III 610 . II 622 . II 554 . III	e Aurigee b — — Doradus Columbee 2 ———	4=30,87 7=42,53 5=49,99 1=54,00	3=31,61 2=31,08 4=42,68 2=49,70 3=53,87	54 31,61 58 30,94 5 2 42,58 8 49,91 9 53,90	5,504 4,439 1,021 2,400 2,151	+ ,014 + ,014 + ,006 + ,003	
626 . II 635 . II 641 . II 577 . III 661 . II	Leporis 22 Orionis Eridani 367 Tauri 25 Aurigæ	5= 8,50 6= 2,78 4=49,63 12= 3,61	3= 8,46 6=23,68 3= 2,62 1=49,34 3= 3,67	10 8,49 13 23,68 15 2,73 20 49,57 22 3,62	2,750 3,055 2,459 3,609 2,941	+ ,016 + ,011 + ,006 + ,011	The place now observed agrees with Piazzi, but differs 8,21s. from A. S. C.
594 . III 679 . II 597 . III 691 . II 609 . III	27 Columbee 41 Orionis 6 84 Camelop. 47 Orionis 6 393 Tauri	4= 3,72	3=56,73 6=13,28 1= 4,16 3=31,75 3=15,11	26 56,73 27 13,28 29 3,81 30 31,84 33 15,17	1,697 2,941 5,495 3,161 3,524	+ ,006 ,000 - ,014 + ,010 + ,014	The place now observed agrees with Piazzi, but differs nearly 5s. from the A. S. C.
626 . III 743 . II 658 . III 677 . III 447 . IV	Columbæ Aurigæ n Camelop. Columbæ Geminor. seq	1= 5,63 5=42,21 1=45,72	3= 5,51 2=42,11 3=29,06 4=45,39 1= 7,54	38 5,54 50 42,18 51 29,06 59 45,45 6 4 7,54	1,972 3,765 4,752 1,730 3,663	+ ,007 + ,006 + ,005 - ,001 - ,001	This observation was omitted.

Reference.	Names.		R Jan. 1, —from	Concluded Mean A. R.	Ann	nual	Remarks.
No. Vol.		former obs.	present obs.	Jan. 1, 1836.	Precesn	Р. М.	
785 of II 452 . IV 703 . III 710 . III 716 . III	Orionis l Monocer. 25 Monocer. 31 Geminor. 9 Lyncis	5. *5= 4,65 2=60,70 1=33,46 4=29,06	8. 4= 4,15 3=18,65 3=52,04 3=33,44 2=29,52	h. m. s. 6 8 4,43 8 18,65 9 52,04 11 33,44 12 29,21	s. +3,303 2,767 2,817 3,586 5,243	8. + ,010 + .008 - ,017 + ,007 - ,001	The results in each year agree very well inter—  se: -this Star must be re-examined.  These observations were omitted.  In 1835 a wrong star appears to have been observed; -on the present occasion the small star mention by P. was observed; preceding 25 min. 15 05s.
718 . III 793 . II 799 . II 728 . III	Canis Maj. Monocer. Geminor. 15 ————————————————————————————————————	*1=55,90 6=39,90 3=59,24 5= 0,07 4=19,94	2=56,17 1=39,73 6=59,20 6= 0,12 2=19,95	14 56,08 14 39,88 17 59,21 18 0,10 18 19,94	2,300 3,158 3,576 3,576 2,078	+ ,014 + ,005 + ,012 + ,009 + ,002	The result in Vol. III belongs to Piazzi, No. 81. Omitted in Vol. III.
805 . 11 739 . 111 758 . 111 760 . 111 770 . 111	17 Geminor. 120 Camelop. 50 Geminor. 26 Navis 6v' Canis præc.	3=26,42	2=25,28 3=23,56 4=32,33 3=44,05 3=12,26	19 25,28 21 25,04 26 32,33 26 44,05 29 12,20	3,588 30,934 3,474 2,047 2,624	+ ,066 + ,007 + ,002 + ,005	This Star is now of the 9,10 mag.  N. P. D. = 2°,44′ diff. = 2°,04 of arc.
772 . III 774 . III 783 . III 835 . II 794 . III	Lyncis 22 ———————————————————————————————————	1=20,05 — 6=58,92 1=51,29	5=20,63 3=27,78 3=52,60 6=59.29 3=51,47	30 20.54 30 27,78 32 52,60 35 59.10 37 51,43	5,326 5,114 6,291 6,522 3,254	+ ,007 + ,019 + .012 - ,019 + ,013	This — P. M. partly accounts for the difference (nearly 2*) from the A. S. C.
795 . III 840 . II 807 . III 848 . II 855 . II	49 Navis 18 Monocer. & 29 Lyncis 13 Can. Maj. * Geminor.	1=54.82 6=18.56 4=10.95 19=43.04 6=44,21	2=55,08 l=18.28 3=11,24 l=43,04 3=44,17	37 54,99 39 18,52 43 11,07 43 43 04 46 44,20	1,999 3,128 5.148 2,238 3,492	+ ,039 + ,005 + ,014 + ,004 + ,010	
814 . JII 827 . III 832 . III 888 . II 901 . II	Lyncis 131 Camelop. Monocer. 51 Geminor. Piscis. Vol.	3= 6.34 •3=54,07 12=56,99 6= 6,92	1= 6.69 3=56.23 4=18.50 1=57 25 4= 6,48	47 6.43 53 55,15 54 18,50 7 3 57,02 10 6,74	5,143 11,802 2,977 3 447 	+ ,009 - ,036 + ,013 + ,007	N. P. D. = 80,27'
881 . III 891 . III 910 . III 925 . III 936 . III	Lyncis 144 Geminor. Navis 153 Camelop.	1=48,03 l= 9.63 5=47,51	2=48,31 3=20 90 3= 9,49 3=49,02 3=33,56	11 48,22 14 20,90 22 9,52 28 48,08 32 33,56		+ ,003 + ,011 + ,014 + ,198 + ,019	•
954 . III 966 . III 974 . II 980 . III 982 . II	Off. Typ.  11 Argus Cumelop. Argus	1=51,54 6=48,72 4=43,11 8=36,26	3=48,67 3=51,53 3=48,74 3=43,38 2=36,26	40 48,67 44 51,53 49 48,73 51 43,23 52 36,26	2,578 4,972	+ ,015 + ,011 + ,003 + ,005	
988 . II 993 . III 997 . II 1024 . II 1029 . II	55 Camelop. Navis Cancri Argus	6=23,61 1=11,31 — 6=59,24	3=23,77 2=11,51 6=19,62 6=51,22 2=59,25	56 23,67 57 11,41 8 2 19,62 16 51,22 17 59,24	3,643	+ ,015 + ,004 + ,001 + ,026	
1038 . II 1041 . II 1049 . II 1057 . III 1055 . II	34 Cancri Monocer. Cancri 102 Cancri	6=44,34 5= 8,94 5=25,79 4=56,91 9= 2,12	4=43,86 2= 9.07 2=25,83 1=56,76 1= 1,95	23 44,15 24 8,98 30 25,80 30 56,88 31 2,10	3,271 2,696 3,457 3,457 3,456	+ ,014 + ,022  + ,016  + ,020  + ,003	

## SUPPLIMENTARY CATALOGUE

Reference.	Names.	Mean A. R. Jan. 1836—from	Concluded	Annual	P
No. Vol.	Names.	former obs. present	obs. Mean A. R. Jan. 1, 1836.	Precesa. P. M.	Remarks.
1067 of III 1068 . III 1105 . II 1109 . III	Navis d 133 Cancri Argus c 209 Cancri Pixid Naut.	8. 1=32,08 3=38,48 20=30,25 3=51,10 6=50,94 8. 2=32 2=32 4=29 3=51 6=50,94	98   39 38,68 ,69   58 30,16 ,39   9 0 51,24	*** *** **** *****  ******  *****  *****	The Paramatta obs. differ 3s. from this result.  The Paramatta observations with the Transit, differ 1,32s from this result.
1118 . III 1121 . III 1127 . II 1132 . II 1148 . II	Hydræ Navis &t 24 Hydræ Leonis Ursæ Maj. d	5=51,00	20 8 25,13 51 8 39,03 62 11 37.55	2,935 + ,008 2,384 - ,008 2,940 - ,009 3,523 - ,021	N. P. D. 19°,26′.
1155 . II 1162 . III 1185 . III 1191 . II 1226 . II	Leonis h 88 Ursæ Maj. 66 Leonis 9 Sextantis Autl. Pneum.	6= 9.79 4=40,50 3=41 3=30 6=32,30 6=37,14 3=37	07   27 40.74 ,97   38 30,97 ,57   45 32,37	3,224   + ,022 5,761   ,016 3,370   + ,022 3,143   + ,011 2,739   + ,013	
1233 . II 1256 . III 1260 . III 1246 . II 1268 . III	Leonis z Leonis Sextantis 28 k Ursæ Maj.		16 56.91 19 12.77 94 21 8,60 23 24,04	3,145 + ,002 3,166 + ,011 3,067 + ,012 3,050 - ,004 3,828 + ,009	
1270 . II 1275 . II 1276 . II 734 . IV 1311 . III	34 Sextantis 36 ——— Argus Sextantis Hydræ	7= 9,45   3= 9 4=42,77   3=42 18= 7,49   2= 7 5= 4,67   2= 4 	.54 36 42.67 ,56 37 7,50 .97 42 4,76	3,106   + ,033 3,096   + ,015 2,117	These observations were omitted in the Catalogue.
1294 . II 1328 . III 1329 . III 748 . IV 1341 . III	Argus u Leonis p <sup>1</sup> 21ò Ursæ Maj. Leonis Ursaæ Maj.	11=51,61 4=51 3=13.16 2=13 3=22,96 1=22 1= 4,71 4= 4 3=10,40 2=10	,20   55 13,18 ,98   55 22,96 ,70   58 4,70	2,396 3,073 + ,009 3,369 + ,014 3,118 + ,008 3,558 + ,006	These observations were omitted in the Catalogue.
1344 . III 1350 . III 1353 . III 1368 . III 1370 . III	223 Ursæ Maj.  322 Leonis  Hydræ X <sup>1</sup> 370 Leonis	3=57.36   1=57   1= 4,84   3= 4   2=22.26   1=22   1=17.51   2=17   3=43,89   4=43	90 5 4,89 20 7 22.24 27 15 17,35	3,447   + ,010 3,500   + ,010 3,141   + ,029 2,886   + ,011 3,097   + ,006	
1376 . III 1353 . II 1354 . II 1355 . II 1411 . III	Hyd. & Crat.  17 Crateris  Hydræ	1=15,20 2=14 7=36,20 2=36 6= 9.45 2= 9 5=27,97 3=27 1= 4,55 3= 4	,14 23 36,18 ,25 24 9,40 ,76 24 27,89	3,020 + ,016 3,047 + ,003 2,955 - ,014 3,043 + ,016 2,960 - ,006	
1416 . III 1427 . 11I 1388 . II 1454 . III 1400 . II	Leonis Virginis Corvi	3=33,75   1=33 1=31,72   3=32 6=38,31   4=38 1=36,91   3=36 5=38,34   4=38	.14   40 32,03 .25   52 38,29 .61   11 54 36,69	2,974 + ,013 3.099 - ,004 3.067 + ,007 3,056 + ,007 3,074 + ,014	
1406 . II 1493 . III 1496 . III 1412 . II 1500 . III	Crucis & Virginis g 18 Canum Ven. 13 Virginis n 45 Comæ Ber.	13=29.50 3=45,06 1=16,05 1=16,52 1=28 2=45 1=14 4=16 3=16	,60 9 45,28 ,56 10 14,56 ,19 10 16,08	3,125 3,071 3,028 3,068 3,068 3,031 ,000	Differs 2s. + from A. S. C.

Reference.	Names.	Mean A. R. Jan. 1, 1836.—from	Concluded Mean A. R.	Anoual	Remarks.
No. Vol.		former obs. present obs.	Jan. 1, 1836.	Precesn. P. M.	NEAR ALS.
1501 of III 1503 . III 1516 . III 1445 . II	19 Draconis. 26 Corvi. Comæ Ber. 20 Virgmis. Corvi.	s.     s.       1=42,05     3=25,96       3=42,06     3=49,16       5=44,86     4=44,87       2=29,34     3=29,27	h. m. s. 12 11 25.96 11 42,06 15 49,16 24 44.86 25 29,30	8. +2,796 + ,069 3,095 - ,007 3,021 + ,011 3,040 + ,006 3,130 + ,028	
1544 . III 1460 . II 1562 . III 1577 . III 828 . IV	Come Ber.  26 Virginis x  311 Virginis.  Come Ber.  pre.	1=35,20 3=35,78 6=47.53 4=47,35 1=10.19 3=10,23 3=597 1=6,27 2=47,65 3=47,82	26 35,64 30 47,46 38 10,22 43 6,04 43 47,71	2,995 + ,007 3,090 + ,011 3,028 + ,013 2,977 + ,011 2,975 + ,038	These were omitted in the Catalogue.
1578 . III 1598 . III 1604 . III 1503 . II 1615 . III	Centauri.  Centauri.  Ganum Ven.  Ganum Ven.  Ganum Ven.  Ganum Ven.  Ganum Ven.  Ganum Ven.  Ganum Ven.	3=47,69 3= 4,52 1=45,19  1=16,08 1=48,12 3= 4,24 4=44,90 3= 3,98 ·3=16,14	43 47,79 52 4,38 54 44,96 58 3,98 13 2 16,12	$ \begin{vmatrix} 2,975 \\ 3.262 \\ 3.277 \\ 2,820 \\ 3,126 \end{vmatrix} + ,011 \\ - ,003 $	
1619 . 111 1639 . 111 1649 . 111 1659 . 111 1660 . 111	Centauri. m 205 Comæ Ber. Ursæ Maj. Virginis.	1=56,37 3=15.86 3=18.96 3=25,40 *3=22,83 1=25,28 2=22,90	2 56,12 12 15,84 18 18.93 22 25,37 23 22,86	3.341 — ,018 2,928 + ,015 2,410 + ,013 2,227 + ,002 3,080 — ,043	
1668 . III 1694 . III 1565 . II 1568 . II 1570 . II	7 Bootis. Virginis. 86 o 3 Bootis. Centauri v	3=57.60 1=11,23 6=12,68 3=6,29 2=42,19	26 57,60 37 11,19 37 12,72 39 6.29 39 42,19	2.951 + ,009 3,169 - ,004 3,180 + ,010 2,789 + ,005 3,553 + ,005	
1728 . III 1594 . II 1608 . II 1753 . III 1759 . III	Bootis. Virginis. 96 y 642	3=45,13   2=45,05 5=26.72   1=26,48 7=16.99   2=16,86 2=37,15   3=37,30 3=17,73   3=17,39	50 45.10 51 26,68 14 0 16,95 1 37,24 3 17,51	2,897 + ,004 3,148 + ,012 3,180 + ,010 2,936 + ,010 3,131 + ,013	
936 . IV 1768 . III 1627 . II 1630 . II 1633 . II	Bootis.  18 —	3=40,28 3=36,19 1=36,32 4=20,16 1=39,97 4=28,47	4 40 30 7 36,22 11 20,16 13 40,11 15 28,47	2,961 + ,007 2,146 + ,028 2,891 + ,019 3,442 - ,002 3,399 + ,009	These observations were omitted in the Catalogue.
1795 . III 1801 . III 954 . IV 1822 . III 963 . IV	Bootis. Hydræ. Virginis. Libræ.	2=34.29 2=0,18 4=2.10 3=36,06 2=28,51 2=35,80 2=28,46	18 34,29 21 0,18 25 2,05 28 35,96 33 28,48	2,792 + ,009 3,489 - ,018 3,153 + ,009 3,113 - ,001 3,236 - ,004	This observation was emitted in the Catalogue.  These observations were omitted in the Catalogue.
1671 . II 1673 . II 1676 . II 1854 . III 1690 . II	11 Hydræ. Libræ. 13 Hydræ. Libræ.		37 51,50 37 55.37 38 23,19 45 25,53 47 54,42	3,462 + ,014 3,387 + ,011 3,481 + ,008 3,064 + ,007 3,404 + ,079	Differs 3s. from A. S. C. See Piazzi's Note.—
1696 . II 1698 . II 1702 . II 1707 . II 1709 . II	1 Serpentis. Bootis. Libræ. 41 Buotis.	$\begin{array}{c c}$	49 9,15 49 32,96 53 25,37 54 55 57 56 42,12	3.060   + ,011 2,792   + ,006 3,179   + ,005 2,642   + ,016 3,456   + ,017	·

<sup>\*</sup> See errata.

# SUPPLIMENTARY CATALOGUE

Reference.	Names.			R. Jan. 1, —from	Concluded Mean A. R.	Anı	nual	Remarks.
No. Vol.			former obs	present obs.	Jan. 1, 1836.	Precesn.	Р. М.	
1879 of III 1885 . 111 1718 . II 1719 . 11 1720 . II	l	κ¹ <i>b</i>	2= 4,36 ====================================	8. 2=12,87 3= 5,13 5=34,63 3=19,10 3=26,84	h. m. s. 14 56 12,87 58 4,82 15 0 34,63 1 19,10 1 26,84	+4,121 2,585	+ ,019 + ,012 + ,009 + ,004	N. P. D. 14°,28'.  ** follows at 0m. 36,16s.
1898 . III 1727 . II 1736 . II 1737 . II 1743 . II	97 Libræ 3 Serpentis 5 — — Bootis 6 Serpentis		3=12,84	3=12,81 4= 2,57 4=56,95 4= 3,45 4=41,54	5 12.82 7 2,57 10 56.95 11 3,45 12 41,54	3,378 2,973 3,026 2,685 3,045	- ,001 + ,004 + ,032 + ,003 + ,024	
1906 . III 1744 . II 1001 . IV 1752 . II 1757 . II	30 Libræ o Cor. Bor. Libræ	0	3=21,68 2=32,82	1=21,65 2=53,90 1=32,58 3=55.57 4=49,09	13 21,67 13 53,90 13 32,74 20 55,67 21 49,09	2,487 3,327 2,484 3,375 5,349	+ ,003 + ,008 + ,001	This observation was omitted in the Catalogue.
1763 . II 1768 . II 1769 . II 1771 . II 1772 . II	37 Libræ 39 ———————————————————————————————————	,1 ,1	7=13,30	$ \begin{array}{c} 1 = 13.48 \\ 3 = 5.22 \\ 2 = 39.18 \\ 2 = 6.20 \\ 2 = 9.37 \end{array} $	25 13,32 27 5,92 27 39,18 28 6,90 28 9,37	3,242 3,615 3,574 2,721 3,068	+ ,023 + ,006 + ,010 + ,003 + ,006	
1773 . II 1776 . II 1778 . II 1779 . II 1790 . II	41 Libræ Lupi	ρ2 φ g γ		2=18.69 2=56,04 3=29,14 1=54,55 4=51,45	28 18,69 28 56,04 29 29,14 29 54.55 35 51,45	3,427 4.093	+ ,008 + ,009 + ,021 + ,071 + ,010	
1792 . II 1804 . II 1805 . II 1808 . II 1965 . III	36 Serpentis 10 Cor. Bor. Scorpii	θ δ δ δ ξ	3=25,60	4=26,03 4=43,51 4=43,11 4= 8,10 2=25,51	36 26,03 42 43,52 42 43.11 44 8,10 46 25,56	+3,118 2,516 3,561	- ,034 + ,003 + ,002 + ,033 + ,006	
1032 . IV 1966 . III 1817 . II 1821 . II 1824 . II	100 Serpentis Serpentis	r n	3=45,22	2=26,17 4=45,14 4=21,13 4=16.60 4= 4,50	46 26,17 46 45,17 47 21,13 49 16.60 50 4,50	3.943	+ ,020 + ,012 - ,002 + ,002 + ,023	These were emitted in the Catalogue.  On the 11th June 1837 a star was observed at the Transit, following at 0, 42s.
1835 . II 1987 . III 1988 . III 1839 . II 1838 . II	6 Heroulia	θ υ	3=30,36	4=50,77 4=30.52 2=49,15 4=41,55 3=48,01	55 50,77 56 30,45 56 49,15 57 41,55 57 48,01	3,911 3,911 1,856	+ ,011 + ,012 + ,008 + ,019 + ,013	
1992 . III 1847 . II 1848 . II 1850 . II 1863 . II	Scorpii	K1 e3		1= 2,75 2=40.51 2=51,89 2=13,01 3=14,68	58 2,75 16 0 40,51 0 51,89 2 13,01 3 14,68	2,857 2,703 3,709 3,673 3,234	+ ,003 + ,002 - ,001 ,000 + ,012	
1855 . II 1856 . II 2014 . III 1866 . II 2018 . III	37 ———	T h	3=12,79 1=29,02	3= 3,38 4=39,14 1=13,17 4=11,43 3=29,47	4 3,38 4 39,14 8 12,88 9 11,43 10 29,36		+ ,005 + ,004 + ,010 + ,016 + ,020	



Refere	nce.	Names.	<del></del>		R. Jan. 1, —from	Concluded Mean A. R.	Anı	oual	Remarks.
No.	Vol.			former obs.	present obs.	Jan. 1, 1836.	Precesn.	Р. М.	
1058 of 1059 . 1877 . 1881 . 1072 .	IV II II	Scorpii  5 Ophiuchi 21 Cor. Bor. Scorpii	præc. seg. g	s. 1=55,11 1=55,69 3=45,65 	s. l=55,16 l=55,49 2=46,00 4=18,75 3= 2,34	h. m. s. 16 10 55,14 10 55,59 15 45,79 16 18,75 20 2,45	8. +3,494 3,494 3,578 2,255 3,627	8. + ,001 - ,006 + ,004 + ,017 + ,012	Omitted in the Catalogue. Do. Do.
1888 . 2076 . 2078 . 2080 . 1086 .	III   III   III	22 Scorpii Ursæ Min. Draconis ——. Scorpii	ż		4=15,41 4= 1,41 4= 1,18 4=22,05 1=25,35	20 15,41 35 1,41 36 1,18 37 22,05 39 25,35	3,626 -3,528 +0,771 1,179 4,183	+ ,010 - ,021 + ,007 + ,027 - ,010	This observation was omitted in the Catalogue.
1921 . 2094 . 2097 . 2101 . 1930 .	III 111 111	Scorpii 151 ———————————————————————————————————	μ² var. X²	3=32,42	3=14,78 2=32,68 2=42,10 4=30,11 2=57,48	41 14,78 42 32,52 42 42,10 43 30,11 44 57,48	4,040 4,185 4,187 1,217 2,480	+ ,005 - ,001 + ,026 + ,035 + ,005	
1929 . 1933 . 1938 . 1939 . 2113 .	]] ]] ]]	Aræ  54 Herculis Ophiuchi 90 ———	ζ •		2= 5,16 2=32,73 2= 9,84 4=55.99 3=59,30	45 5,16 46 32,73 48 9,84 49 55,99 49 59,30	4,922 4,743 2,638 3,657 3,429	 - 0,03 + 0,13 + 0,12	
1942 . 2119 . 2123 . 1950 . 2125 .	III   III   II	Ophiuchi Herculis 103 Ophiuchi 19 Draconis 122 ———	h	5=12,08  3=8,07 1=36,84	l=12,07 6=32,23 4=38.89 2= 8.57 2=37,39	50 12,08 52 32,23 54 38,89 55 8,27 55 37,21	3,481 2,818 3,677 0,266 0,279	+ ,016 + ,010 + ,002 + ,048 + ,004	N. P. D, = 24°,36′. N. P. D, = 24°,43′.
1953 . 1956 . 1958 . 2139 . 1965 .	11 11 111	32 Ophiuchi ————————————————————————————————————		4=43,99 	4=37,36 4= 5,62 2=44,12 3=28,93 3= 2,39	55 37,36 57 5,62 58 44,03 17 0 28,93 4 2,39	2,740 3,083 3,471 1,581 3,722	+ ,013 + ,011 + ,007 + ,020 + ,010	
2150 . 2154 . 2155 . 1973 . 1974 .	III III II	Draconis 129 Herculis 39 Ophiuchi	o	3=20,03	3=38,77 2=13,31 2=20,35 2= 1,15 2= 6,76	4 38,77 6 13,31 6 20,16 8 1,15 8 6,76	1,146 0,688 2,725 3,650 3,644	- ,002 + ,012 + ,007 + ,001 + ,020	
1977 . 1979 . 1983 . 1984 . 2174 .	]I   ]I   II	22 Draconis Ophiuchi Aræ Ophiuchi	ζ γ β	3=53,77	2=19,52 2=21,09 2=36.94 2=41,29 2=53,70	8 19,52 10 21,09 11 36,94 11 41,29 16 53,75	0,153 3,481 5,019 4,958 3,580	+ ,004 + ,009  + ,005	Differs 17,60 from A. S. C.
2004 . 2014 . 2195 . 2022 . 2023 .	III III II	Ophiuchi  54 ———————————————————————————————————	ν <sup>1</sup> ν <sup>3</sup>	2=28,06 	3=27,96 2=49,30 3=52,21 2=57,27 2= 2,42	20 28,00 26 49,30 28 52,21 28 57,27 29 2,42	3,057 2,756 1,521 1,156 1,157	+ ,003 + ,022 + ,009 + ,029  + ,028	
2030 . 2213 . 1185 . 2217 . 2220 .	III IV III	27 Draconis 323 Herculis 83 ————————————————————————————————————	f	1=37,86  2=45,14  2=54,13	2=38,00 3=59,30 2=45,09 1=13,76 3=54,57	32 37,95 34 59,30 35 45,11 37 13,76 37 .54,40	$\begin{array}{c} -0.290 \\ +2,458 \\ +2,458 \\ -1,668 \\ +2,929 \end{array}$	+ ,003 + ,008 + ,001 - ,022 + ,003	•

### SUPPLEMENTARY CATALOGUE

Reference.	Names.	Mean A. R. Jan. 1, 1836from	Concluded Mean A. R.	An	nual	Remarks.
No. Vol.		former obs present of	1 1000	Precesn.	Р. М.	
2041 of 11 2221 . III 2222 . 1II 1194 . IV 2047 . II	28 Draconis  Ophiuchi  Sagittarii	**. 3=54,65	37 55,15 38 39,44 39 0,37	-0,367 +2,934 2,932 2,934 3,852	8. + ,005 + ,006 + ,015 + ,009 + ,014	This observation was omitted in the Catalogue.
2232 . III 2233 . III 2234 . III 2236 . III 2246 . III	Telescopii Ophiuchi Telescopii  356 Herculis	2=57,6 1=7,1 1=27,0 1=58,90 1=59,1 3=46,00	42 7,13 42 27,08 42 59,02	3,969 3,539 3,996 3,992 1,563	+ ,018 + ,010 + ,004 + ,002 + ,020	·
2251 . III 2062 . II 2063 . II 2064 . II 2065 . II	Herculis 6 Sagittarii 66 Ophiuchi 94 Herculis	2=44,73 2=51,7 1=58,34 5=58,44 1= 8,54 2=13,99	51 51,71 51 58,43 52 8,54	1,948 3,480 3,628 2,970 2,291	+ ,010 - ,005 + ,004 + ,001 + ,018	
2261 . III 2067 . II 2069 . II 2070 . II 2073 . II	19 Sagittarii 7 α Sagittarii Tauri Pon Aræ θ		52 48,45 52 50,52 52 53,21	3,632 3,670 3,573 2,921 4,665	,000 + ,007 + ,002 + ,019	Differs 1,5s. from A. S. C.
2264 . III 2266 . III 2268 . III 2084 . II 2083 . II	Sagittarii Telescopii B Draconis Sagittarii	3=58,67   1=59,7 1=58,55 2=54,7 5=47,15 3=21,7	54 58,64 55 54,77 56 47,15	3,630 4,333 -2,743 -2,710 +3,593	+ ,002 - ,011 + ,017 - ,018 + ,012	
2281 . III 1246 . IV 2298 . III 2109 . II 2110 . II	Sagittarii  Clyp. Sob. 58 Serpentis n 20 Sagittarii e	$ \begin{vmatrix} \\ 3=29,20 \\ 1=20,80 \\ \\ 7=17,15 \end{vmatrix} 1 = 22,24 \\ 2=29,13 \\ 2=20,90 \\ 3=49,70 \\ 1=17,2 $	7 29,18 12 20,91 12 49,70	3,721 4,085 3,460 3,092 3,983	- ,006 - ,003 + ,008 - ,001	These observations were omitted in the Catalogue.
2119 . II 2306 . III 2311 . III 2125 . II 2126 . II	Pavonis 167 Draconis Sagittarii Clyp. Sob. Sagittarii	2= 3,3'   2=14,10'   2=   4=15,8'   3=51,1'   2=19,50'   1=19,5'	16 13,86 19 15,87 19 51,02	5,615 -0,350 +3,938 3,416 3,935	+ ,005 + ,009 + ,001	
2127 . II 2135 . II 2136 . II 1267 . IV 2137 . II	Clyp. Sob. Sagittarii v²  Clyp. Sob. s¹	2=19,86   3=25,89	23 12,05 23 13,04 23 19,91	3,417 3,936 3,666 3,933 3,424	- ,001 + ,009 + ,004 + ,004	This observation was omitted in the Catalogue.
2140 . II 2138 . II 2141 . II. 2142 . II 2324 . III	Sagittarii Pavonis   24 Sagittarii Clyp. Sob. s² Sagittarii	2=33,79 2=49,44 1=52,54 1=52,44 3=16,90 1=41,61 1=41,33	23 49,46 23 52,50 24 16,96	3,512 7,054 3,666 3,423 3,931	+ ,007 ,000 + ,011 - ,003	Differs -2,65s. from A. S. C
2328 . III 2151 . II 2152 . II 2153 . II 2154 . II	Lyræ Clyp. Sob. Sagittarii Herculis Sagittarii	1=21,66   1=22,44 2=20,28 2=32,65 2=40,26 3= 6,74	28 20,28 28 32,62 28 40,20	2,005 3,483 3,649 2,492 3,582	+ ,009 + ,006 + ,015 - ,008 + ,002	The observation in 1835 is in complete, and marked "faint"I have given it half the credit of the other.
-					•	

Reference.	Names.			R. Jan. 1, —from	Concluded Mean A. R.	Anı	nual	Remarks.
No. Vol.			former obs.	present obs.	Jan. 1, 1836.	Precesn.	Р. М.	
2332 of III 2340 . III 1281 . IV 2347 . III 2183 . II	37 Lyræ 14 Cor. Aust.  Lyræ Sagittarii		*2=51,63 3=33,46 1=35,51 2= 5,08	8. 2=52,52 1=33,38 1=35,82 3=35,81 2= 5,07	h. m. s. 18 29 52,07 32 33,44 32 35,66 36 35,81 46 5,04	8. +2,004 4,172 4,172 2,095 3,634	+ ,002 - ,021 - ,019 + ,005 + ,013	This observation was omitted in the Catalogue.
2366 . III 2193 . II 2389 . III 1350 . IV 1354 . IV	Sagittarii 64 Serpentis 114 Lyræ Aquilæ		1= 2,12 3=48,19 3=58,76 2=16,54	1=38,75 2= 1,83 3=47,85 2=58,71 1=16,66	46 38,75 49 1,92 56 48,02 19 6 58,74 8 16,58	3,632 3,015 1,693 2,864 2,864	+ ,015 + ,011 + ,014 + ,026 + ,009	These were omitted in the Catalogue. Do. Do. Do.
2236 . II 2244 . II 2246 . II 2247 . II 2249 . II	Sagittarii ———————————————————————————————————	β³ A d		1=38,92 1=21,36 1= 0,08 1= 0,23 1= 8,08	9 38,92 11 21,36 12 0,08 12 0,22 12 8,01	3,430 4,346 3,519 2,796 3,095	- ,004 - ,012 - ,003 - ,001 + ,009	
2264 . II 2269 . II 2271 . II 2272 . II 1387 . IV	Sagittarii 4 Vulpeculæ 3 Cygni 60 Draconis Anseris	T	1= 6,07	2= 6,03 2=17,05 2=38,66 2=39,41 1=18,47	17 6,04 18 17,05 18 38,66 18 39,41 19 18,28	3,403 2,623 2,491 —1,057 +2,621	+ ,008 + ,014 - ,009 + ,036 + .005	N. P. D. 16°,54'. This observation was omitted in the Catalogue.
2427 . III 2276 . II 2446 . III 2447 . III 1430 . IV	19 Cygni Sagittarii 39 Cygni Sagittarii Sagittæ		3= 5,81 5= 9,76 3=45,26 	3= 5,82 2= 9,72 2=45,29 2=50,20 1= 5,35	20 5,81 21 9,75 27 45,27 27 50,20 34 5,50	1,571 3,566 1,272 3,298 2,674	+ ,012 + ,005 + ,007 + ,007 + ,009	These observations were omitted in the Cata-
1436 . IV 1437 . IV 2464 . III 2465 . III 2468 . III	Sagittæ 73 Cygni Aquilæ Cygni	¥	2=18,86 4=28,18 2=27,59 2=41,29 3=38,64	1=18,75 2=28,23 2=27,27 1=41,43 2=38,60	35 18,83 35 28,20 37 27,43 37 41,33 39 38,63	2,670 2,680 1,610 2,914 2,197	+ ,016 + ,004 - ,001 + ,017 + ,005	logue.
2478 . III 2481 . III 2482 . III 1475 . IV 2505 . III	Aquilæ 25 Søgittæ 187 Aquilæ  Cephei	!	3=23,05 3= 3.02 3=44,52 3= 5,91	1=22,76 1= 2,95 2=44,85 2= 5,80 2=38,96	44 22,98 45 3,00 45 44,65 54 5,87 55 38,96	2,830 2,673 3,250 2,835 1,242	- ,014 + ,002 - ,017 + ,004 + ,022	These observations were omitted in the Catalogue.
2363 . II 2365 . II 2510 . III 2370 . II 2524 . III	63 Aquilæ 15 Sagittæ Draconis 17 Vulpeculæ Antinous	t z e <sup>l</sup> i	5=44,34 5=50,36 2=	3= 7,66 2=44,13 2=43,32 1=50,56 1=52,27	56 7,66 56 44,28 59 43,32 59 50,39 20 2 52,27	2,929 2,686 0,657 2,573 3,080	+ ,009 + ,002 + ,011 ,008 + ,015	The result in Vol. II. belongs to Piazzi No. 12.

<sup>\*</sup> It has long been a subject of great perplexity to me—that the discordances to be met with among observations, should occasionally so far exceed the probable, and even what one could suppose—the possible limits of error; this complaint however, is not altogether new;—ior, so far back as 1825, Mr. Pond remarked that the results of observations of the Star Regulus derived from the two Mural Circles at Greenwich, differed, to an amount exceeding that which could reasonably be attributed either to the observers, or to the Instruments; be this as it may—the discordance which here occurs is so singularly large, that it merits particular investigation;—according I have examined and re-examined again and again every figure of the computation, in the hope of finding an error, or some circumstance, whereby the credit of the observer and instrument might be vindicated; the only circumstances which affect the two observations in the one case from those in the other, are, differerent observers,—and, that in the former observations a Lyrae was observed in conjunction with this star (it being in the field with it):—this latter circumstance may appear trifling; but 1 have noticed, that any disturbance of the observer's attention, such as being hurried to observe a second star, invariably causes him to note the time toe soen.



## Supplimentary Catalogue

Refe	rence.	Names.	Mean A. R. 1836—fr		Concluded Mean A. R.	Ann	ual	Parante
No.	Vol.	Maures.	former obs. pro	esent obs.	Jan. 1, 1836.	Precesn.	Р. М.	Remanks.
2379 2534 1530 2390 1540	. IV . II	19 Vulpeculæ Cygni b³ 18 Sagittæ Antinoi	$ \begin{array}{c cccc} 1 = 23,68 & 1 \\ 1 = 31,77 & 3 \\ 5 = 7,56 & 2 \end{array} $	=56.87 =23,68 =31,69 = 7,49 =23,97	h. m. s. 20 4 57,12 8 23,68 8 31,71 3 7,54 12 23,91	*** +2,503 2,236 2,239 2,632 3,202	8. + ,027 + ,015 + ,003 + ,013 + ,011	These have been omitted in the Catalogue.  These were omitted in the Catalogue.
1542 2546 2567 2575 2420	. III . III	Capricorni Cephei Cygni Ursæ Min. λ 46 Cygni ωs	$\begin{array}{c c} - & 2 \\ - & 5 \\ - & 1 \end{array}$	= 6,02 $= 31,76$ $= 50,70$ $= 54,00$ $= 15,26$	13 5,87 13 31,76 23 50,70 24 54,00 26 15,35	3,395 -1,905 +1,836 49,116 +1,848	+ ,015 + ,097 + ,007 + ,094 + ,012	N. P. D. $12^{\circ},40'$ P. M. = $0^{*},30$ of arc. N. P. D. $1^{\circ},11'$ P. M. = $0^{*},03$ of arc.
1598 2576 2431 2434 2433	. III . II	Aquarii 53 Capricorni 27 Vulpeculæ <i>p</i> 8 Delphini <i>θ</i> 1 Aquarii	$\begin{vmatrix} 3 = 31,30 & 1 \\ & 2 \\ 6 = 59,65 & 1 \end{vmatrix}$	=21,47 $=31,20$ $=5,11$ $=59,55$ $=0,41$	26 21,38 28 31,28 30 5,11 30 59,63 31 0,41	3,248 3,407 2,554 2,829 3,070	- ,004 + ,019 + ,011 + ,011 + ,009	This observation was omitted in the Catalogue.
2592 1642 2603 1652 2460	. IV . III . IV	Delphini Aquarii 61 Cephei Vulpecul <del>as</del> Capricorni		=26,44 =37,71 =43,91	34 26,52 36 —— 38 37.71 40 43,82 41 ——	2,750 -3,109 +2,579 3,595	+, 016 +,023 ,000	Not now visible! This observation was omitted in the Catalogue. The A. R. observed in 1833 pertains to another star—the place in the A. S. C. must be wrong, or the star has disappeared.
2478 2622 2488 2629 2638	. II . III . II . III	32 Vulpeculæ q 33 x Microscopii	2=56,60   1	=34,40 = 1,87 =56,86 =43,60 = 8,37	46 34,43 48 1.87 50 56,77 50 43,60 55 8,37	2,552 2,552 2,678 2,678 3,693	+ ,012 + ,009 + ,016 + ,009 + ,028	
2641 2643 2646 2649 2664	. III . III . III	Microscopii 7 Vulpeculæ Microscopii Vulpeculæ Aquarii	$ \begin{vmatrix} 2 = 13,91 & 2 \\ 3 = 10,77 & 1 \\ 3 = 43,65 & 1 \end{vmatrix} $	=43.89 =13,87 =10,44 =43,96 =11,50	55 43,88 56 13,89 59 10,69 21 0 43,72 6 11,59	3,934 2,653 3,596 2,668 3,193	,011 + ,002 + ,029 + ,005 + ,013	The blank which precedes this in Vol. III. must be cancelled.
2517 2688 1807 2701 2554	. III . IV . III	8 Equulei ( Cephei Aquarii 111 Cephei Capricorni	$ \begin{array}{c cccc}  & - & 1 \\ 3 = 34,66 & 1 \\ 2 = 35,22 & 1 \end{array} $	=37,00 = 7,89 =34,86 =35,74 =19,61	7 37,38 19 7,89 20 34,71 24 35,39 25 19,65	2,995 1,728 3,262 1,175 3,280	+ ,006 + ,006 + ,015 + ,020 + ,016	This observation was omitted in the Catalogue.
2706 2726 1854 2727 2583	. III . IV . III	Aquarii 377 Cygni ————————————————————————————————————	2=57,61 5 2	= 1,96 ==47,53 ==57,76 ==10,26 =13,15	27 1,96 35 47,53 35 57,72 36 10,26 37 13,30	3,065 2,401 2,402 3,203 2,706	+ ,008 + ,014 + ,011 + ,015 + ,004	These observations were omitted in the Catalogue.
2733 2735 2746 1902 2771	. 111 . 111 . IV	Pegasi 64	$\begin{array}{c cccc} & & 2 \\ 3 = 7,40 & 4 \\ 3 = 6,59 & 1 \end{array}$	=48,65 =14,15 = 7,27 = 6,68 = 5,89	38 48,79 41 14,15 47 7,33 54 6,61 22 0 5,73	2,753 2,519 3,649 3,088 1,840	+ ,005 + ,008 + ,028 + ,013 + ,015	This observation was omitted in the Catalogue.  See Piazzi's Note to these Stars.
2772 2774 2775 2640 2641	. III . III . II	175 Cephei 39 Aquarii Pegasi	$ \begin{array}{c cccc} 1 = 3.70 & 2 \\ 2 = 25.71 & 1 \\ 5 = 34.80 & 3 \end{array} $	= 1,78 = 3,65 =25,20 ==34,83 =56,37	0 1,78 3 3,66 3 25,54 3 34,81 3 56,37	1,812 2,004 2,025 3,243 2,891	+ ,014 + ,010 + ,024 + ,005 + ,013	

Reference.	Names.	1		R. Jan. 1, —from	Concluded Mean A. R.	Ann	ual	Remarks.
No. Vol.		1	former obs.	present obs.	Jan. 1, 1836.	Precesn.	P. M.	
2648 of II 2658 . II 2796 . III 2687 . II 2688 . II	l Lacertæ 162 Aquarii	a H³	8 4=42,66 5=49.86 2=11,60 5=40,66 8=57,83	8. 1=42.42 1=49,75 2=11,62 1=40,85 1=57,99	h. m. s. 22 3 42,61 8 49,84 13 11,61 21 40,69 21 57,85	8. + 3,649 2,599 3,141 3,033 3,182	+ ,023 + ,019 + ,003 + ,006 + ,003	
2689 . II 2818 . III 2821 . III 2823 . III 2825 . III	J7 Pis. Aust. 42 Lacertæ 221 Cephei ————————————————————————————————————	σ	6= 9,95 ===================================	1=10,29 3=20 57 2=20,54 2=52,99 2=20,82	22 10,00 23 20,57 25 20,54 25 52,99 27 20,77		+ ,011 + ,008 + ,176 + ,106 ,000	N. P. D. 40,44' P. M. = 0",21 of arc. N. P. D. 40,37' P. M. = 0",13 of arc.
2833 . III 2844 . III 2711 . II 2713 . II 2852 . III	7 Androm, Pegasi 43 ————————————————————————————————————	P <sup>2</sup>	l=34,91 2=51,39 	2=35.07 1=51.78 2= 3.92 1=27.92 2=22,89	28 34,97 33 51,52 34 3,92 34 27,81 39 22,87	2,802 3,147	+ ,004 + ,001 + ,010 + ,022 + ,003	
2856 . III 2885 . III 2895 . III 2907 . III 2908 . III	237 Aquarii 303 Pegasi Pis. Aust.	N	l=13,24 l=46,32 2=28,49 3=41,20	1=13,32 4=28,20 4=46,22 1=28,14 1=41,51	42 13,28 59 28,20 23 1 46,24 . 9 28,38 9 41,28	3,266 3,015 2,977	+ ,001 + ,018 + ,010 + ,006 + ,045	
2909 . III 2784 . II 2787 . II 2814 . II 2828 . II	Pis. Aust. 7 Piscium 62 Pegasi Aquarii	δ τ A <sup>2</sup>	1=15,61 5=59,31 5=31,80 5= 4,54	1=15,59 1=59,67 2=31,56 1= 4,32 4=16,12	10 15,60 11 59,39 12 31,73 27 4,50 33 16,12	3.046 2,952 3,097	+ ,008 + ,014 + ,012 + ,009 + ,048	The star observed here is of the 9th mag, agreeing with the small star mentioned by Piazzi; has then A <sup>2</sup> disappeared?
2959 . III 2966 . III 2056 . IV 2868 . II	Androm. 306 Cephei Pegasi Cassiopeæ		3=27,44 3=53,51 4=34,02	l=27,13 l=53,55 l=34,07 4=17,67	36 27,36 40 53,52 45 34,03 53 <b>1</b> 7,67	2,866 3.052	+ ,001 + ,026 - ,014	

In bringing up the results of Vol. II. and III. to 1836, as well as in reducing those of 1836—37, to the same epoch, the Annual Precession only has generally been employed; but in a few cases (where the P. M. was large) this too has roughly been applied; thus, to the results brought up with Precession from Vol. II, four times the amount of proper motion has been added: and to those from Vol. III. and from observation in 1836—37 one years proper motion only has been applied.

Note to the Second Eddition—The above remarks relative to the differences from the Paramatta observations, were made before I had examined the Catalogue, and consequently before I had become acquainted with the systematic errors which there occur.—

# SUPPLEMENTARY CATALOGUE OF THE DECLINATION OF THE FIXED STARS.

Referen		A. R.	Names.			cn. Jan. 1, from	Concluded Mean Decn.	Anr	nual	Remarks.
No. V	Vol.				former obs	present obs.	Jan. 1, 1836.	Precesn.	Р. М.	
	111	H.M. 0 1 4 6 11 21	24 Ceti 61 Andromedæ 35 Piscium Tucanæ 117 Piscium	В	5=43,30 5=34,70 10=23,19* 3=47,35	1=35,80 2=19,76	- 6 9 37,01 +40 7 42,66 + 7 54 34,88 -65 50 22,62 +15 7 48,26	+20,038 20,038 20,035 20,019 19,947	-0,06 -,08 -,10 -,13	Differs 2' from A. S. C.
44 . 45 .	II III	23 23 23 26 28	Phœnicis Tucanæ ————————————————————————————————————	λ <sup>1</sup> β <sup>1</sup> β <sup>2</sup>	10=42,26 		-49 42 42,21 -63 51 42,32 -63 52 7,97 -35 53 4,38 +23 6 45,22	19,940 19,935 19,935 19,916 19,887		Differs nearly 1' from A. S. C.
59 . 79 . 58 . 1 108 . 67 . 1	II III II	30 39 50 56 57	31 Andromedæ Piscium 322 Cephei 74 Piscium Cassiopeæ	δ ψ <sup>1</sup> μ	11=41,41 5= 5,88 4= 4,18 5=36,51 4=44,89	2=36,79	+29 57 41,12 + 4 26 6,77 +86 16 4,24 +20 35 36,59 +54 6 44,86	19,968 19,747 19,554 19,435 19,418	-,30 $-1,25$ $+0,12$ $-0,03$ $-1,55$	This large P. M. is in accordance with the diff. from A. S. C. In Vol. III. the result was accidentally omitted. Piazzi states P. M. = -0*,65.
113 . 124 . 132 . 135 . 140 .	II II	58 1 1 4 5 9	79 Piscium 32 Ceti 86 Piscium 88 ——— Cassiopeæ	<b>4</b> 3	4=52,92 5=	3=51,76 $1=23,65$ $1=37,11$	+ 19 51 52,71 - 9 46 51,76 + 6 42 23,39 + 6 7 35,13 +57 20 37,03	19,386 19,321 19,245 19,221 19,119	-0,19 -,29 -,05 -,04 +,02	A wrong star observed in 1832 Pi- gives P. M. —",02
97 . 1 158 . 162 . 167 . 178 .	II II	10 19 21 24 28	Cassiopeæ Piscium 98 ——— Phœnicis 102 Piscium	φ μ δ	4= 2,92 5=34,71 10=43,11 8=41,62 5= 4,99	2= 3,60 1=34,68 5=40,83 4=39,77 4= 3,15		19,114 18,850 18,795 18,706 18,580	+ ,06 + ,03 - ,17 + ,09	
138 . 1 183 . 1 172 . 1 217 . 220 .	IV III II	32 44 50 52 53	137 Cassiopeæ 5 Arietis 153 Cassiopeæ 59 Ceti 57 Andromedæ	γ <sup>1</sup> υ <sup>2</sup> γ	4=11,46 9=22,10 5=36,15 7=30,10 5=22,31	2=35,08 3=30,07	+59 43 11,25 +18 29 21,74 +63 35 35,84 -21 52 30,09 +41 32 22,17	18,434 18,001 17,730 17,697 17,635	+ ,17 ,14 + ,04 ,04 ,00	These 9 observation had been over- looked.  Differs 11" from G. C.
181 . 1 196 . 1 214 . 1 219 . 1 243 .	111 111 111	54 2 2 6 9 11	37 Arietis 52 Persei 262 Eridani 68 Ceti	X o	4=26,66 4=* 4=*	4 = 32,93 3 = 5,23 1 = 27,09	+25 8 25.76 +25 9 32,93 +56 45 5,98 +48 11 27,09 - 3 43 47,26	17,587 17,267 17,050 16,954 16,868	+ ,12	N. P. D. 5º wrong in Vol. 11.
218	IV III III	13 19 23 25 25	Ceti Trianguli 43 ——— 46 ———		4=47,68 2=54,30 4=49,06 4= 2,00 4=13,33	7=52,93 4=49,20 3=59,23	- 3 42 47,02 +28 56 54,00 +33 48 49,13 +33 58 0,81 +34 0 11,87	16,732 ]6,452 ]6,270 ]6,108 ]6,140	- ,03 - ,12 - ,05 + ,15 - ,12	
268 . 270 . 271 . 253 . 1 234 .	11 11 111	27 27 27 27 27 29	Ceti 30 Arietis Ceti Persei	ďι	5 = 1,42 $10 = 45,22$ $4 = 43,01$ $2 = 51,86$	3=47,72 $3=46,37$ $1=43,00$	+ 6 6 1,40 +23 55 47,72 +23 55 46,37 - 4 15 43,01 +48 50 52,94	16,075 16,051 16,048 16,043 15,926	+1,45 -0,05 -,05 -,56 +,06	[(45") from A. S. C. This P. M. accounts for the diff. I have retained the result of 30 Arietis for 1836, in order to shew the difference of Declination.

Refe	ence.	A. R.	Names.		cn. Jan. 1, —from	Concluded Mean Decn.	Annual	Remarks.
No.	Vol.			former obs.	present obs.	Jan. 1, 1836.	Precesn. P. M.	
280 295 242 252 324	. IV . IV	H.M. 2 32 36 37 49 51	83 Ceti 4 Hydri 4 Persei Horologii #	$ \begin{array}{c}                                     $	4=18,55 1=33,41 3=36,87	0 / " —12 34 16,99 —68 58 — +48 29 34,66 +51 22 38,23 —63 31 —	15,528 — 15,470 — ,1	Not now visible!
380 337 261 303 321	. II	52 55 3 3 5 12	8 Eridani p Fornacis Camelop. Messoris As 142 Persei	2 = 23,65 $2 = 26,76$	4=46,64 2=26,34 3=33,84 1= 9,26	- 8 18 47,10 -23 37 - +65 2 26,55 +65 2 33,99 +48 37 9,26	14,483 — ,0 13,948 — ,0 13,801 — ,1	ther star;—from a recent examina- tion this star is not now visible!
368	. II . III . II	13 27 28 42 43	Eridani d Persei 20 Eridani I Tauri	4=13,87	3=59,96 4=15,40 6=49,28 4=35,75 2= 1,51	-43 42 0,72 +30 34 14,63 -18 0 49,28 -38 7 34,28 +16 50 0,29	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Piazzi states the P. M. to be +0*,83
384 439 450 483 482	. II	44 49 56 4 11 11	210 Eridani Hydri Reticuli Doradus 41 Eridani	10=53,80 10=13,10	1= 6,21 3=35,44 4=52,04 3=10,25 3= 9,57	- 5 33 6,37 -71 44 35,44 -61 51 53,30 -51 54 12,44 -34 12 10,28	1 10,772 — 1 10,318 — 2 9,133 —	The observation in 1833 refers to auother star.
506 515 448		14 17 21 22 27	220 Persei 43 Eridani 80 Tauri Eridani		4=26,61 3= 8,14 4=20,30 3=43,31 3=11,09	+33 27 26,60 -34 24 8,05 +15 16 20,30 +42 40 43,31 -30 6 12,32	$ \begin{vmatrix} 8,656 & -,0 \\ 8,434 & -,1 \\ 1 & 8,307 & +,1 \end{vmatrix} $	7 <b>4</b>
332 543 578		28 28 32 50 51	Scep. Brand. Eridani Tauri Eridani	4=54.01 4= 6,83 14= 9,58 1= 9,00	$\begin{vmatrix} 2 = 32,06 \\ 2 = 6,43 \\ 2 = 9,30 \\ 3 = 6,90 \\ 3 = 27,21 \end{vmatrix}$	8 47 53,36 8 38 6,70 +22 38 9,55 +14 17 7,42 10 36 27,21	$     \begin{bmatrix}       7,858 &,0 \\       7,504 &,0 \\       6,081 &,0     \end{bmatrix} $	11   7
610 612 554		54 5 3 4 10 11	Doradus 14 Aurigæ 2 Columbæ	7=54,95 4=57,52 0 10=40,32		+62 15 14,11 -57 41 53,89 +32 29 21,01 -35 6 56,74 -35 3 40,11	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	B 0 C This D M is is accordance with the
672 590 593	. II . III . III . III	24 25 26 27 28		5=43,89	4=23,99 3=12,46	+18 24 59,66 -35 35 44,75 - 4 55 23,95 - 4 58 12,46 + 9 11 42,65	$\begin{bmatrix} 2 & 3,034 & -1, \\ 9 & 2,922 & -1, \\ 6 & 2,813 & -1, \end{bmatrix}$	1 <b>4</b>   08
	. 11	33 34 42	49 Orionis 393 Tauri Columbæ Tauri Columbæ	$ \begin{array}{c c} d & 9 = 36,44 \\ 3 = 37,51 \\ 43 = 55,88 \\ 5 & - 9 = 6,24 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 7 18 37,2 +18 53 38,1 -34 9 56,4 +13 59 35,0 -35 50 5,8	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	O3 A wrong star observed in 1832.
746	. III . II	51 52 57	67 Orionis	$\begin{vmatrix} \beta \\ n \\ 7 \\ 10 = 22,96 \\ 27 = 48,06 \\ 3 = 5,66 \end{vmatrix}$	$ \begin{array}{c c} 3 = 4,58 \\ 4 = 21,80 \\ 3 = 48,33 \end{array} $	+51 34 4,5 -35 18 22,6 +12 46 48,0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	03   11

## Supplementary Catalogue

Reference.	A. R.	Names.	Mean Decn. 1836—		Concluded Mean Decn.	Annual Preces-	Р. М.	Remarks.
No. Vol.		2. values.	former obs. p	resent obs.	Jan. 1, 1836.	sion.		
684 of III 700 . III 703 . III 787 . II 707 . III	H.M. 6 1 8 10 11	Columbæ 24 Monocer. 25 ——— Columbæ  Lyncis	10=29,52	3=52.68 3=37,55 3=12,12 4=29,49 1=11,41	0 / % -37 10 52,68 + 5 8 37,55 -10 40 12,12 -35 5 29.51 +58 30 11,62	-0,152 0,770 0,868 0,914 1,018	+ ,03 + ,04 - ,05  + ,12 - ,10	
791 . II 793 . II 794 . II 799 . II 726 . III	14 15 15 18 18	1 Canis Maj. & Monocer. 8 — b 15 Geminor. 122 Camelop.	5=26,30 5= 7,32 5=58,85	3=46,00 2=26,27 4= 8,50 4=59,27 3= 9,76	-29 59 48,57 + 3 50 26.29 + 4 42 7.84 +20 52 59,03 +79 43 11,26	1,254 1,290 1,541	- ,09 - ,08 - ,69 - ,03 - ,32	·
728 . III 747 . III 770 . III 780 . III 790 . III	19 23 30 32 35	11 Navis 17 Lyncis Canis Maj. יע 23 Lyncis iseq. Canis Maj.	4=46,61 4=43,36	2=34.22 3=51,44 2=44,58 2=40,28 3=49,88	-36 37 33,10 +61 36 51.44 -18 31 45,93 +59 35 42,33 -27 28 49,88	1,620 2,083 2.558 2,795 3,078	,00 + 1,25 + 0,19 - ,15 + ,10	
490 . IV 807 . III 809 . III 854 . II	39 43 45 46 47	Canis Maj. 29 Lyncis Canis Maj. h 14 — 0 Lyncis	4=38,73 4= 9,51	2=29,40 3=38,25 1= 9.25 3=18.17 1=32,97	-20 36 27,33 +57 45 38,52 -31 31 9,46 -11 50 18.17 +57 48 31,70	3,400 3,778 3,853 4,021 4,116	+ ,02 + ,09 + ,09 + ,05	[See Piazzi's note.
820 . III 871 . II 831 . III 511 . IV 847 . III	50 52 55 7 0 2	112 Canis Maj. Geminor. Lvncis Navis 123 Geminor.	5=14,88	3=14,44 1=13.50 4=31,58 3= 6.65 3=44,50	-16 53 14,44 +29 36 14,65 +60 59 31.58 -43 23 6,65 +15 35 43,52	4.363 4,567 4,798 5,109 5,367	- ,05 - ,81 + ,06 + ,46 - ,10	A wrong star observed in 1835;—Differs 26*,59 from A. S. C.  The result in the Catalogue is erroneous.
528 . IV 891 . III 894 . III 917 . III 943 . III	9 14 16 26 35	19 Lyncis 144 Geminor. Navis Canis Min. 186 Navis	4= 8,65	2= 1,33 3=51,43 4= 8,14 3=37,95 3=12,94	+55 34 0.48 +27 56 51.43 -31 44 8.40 + 3 41 37.95 -38 9 13,36	6,010 6,410 6,569 7.384 8,126	- ,06 + ,05 + ,05 - ,02 - ,04	
944 . III 947 . III 957 . III 989 . II 993 . III	36 38 42 56 57	Navis  217 Navis 9 Cancri μ <sup>1</sup> Navis	3=38,28  5=51,98	3=44,94 3=39,90 3=26,93 3=52,32 3=55,21	-38 8 44,94 -44 45 39,09 -24 33 26,93 +23 5 52,11 -19 18 55,21	8,179 8,312 8,639 9,734 9,824	- ,02 - ,59 - ,38 - ,06 + ,12	
999 . II 1004 . II 1009 . II 1013 . III 1024 . II	8 2 5 7 7 16	15 Cancri ψ <sup>3</sup> Piscis Vol. a  Navis  23 Cancri φ <sup>2</sup>	4=51,76	3=27,74 1=51,46 3= 3,87 3=54,98 3=53.14	+30 8 27,74 +18 9 51,70 -68 8 3,87 -31 39 54,98 +27 37 53,14	10,216 10,356 10,572 10,537 11,243	+ ,11 - ,04 + ,09 + ,02	
1032 . II 1049 . II 1055 . II 1061 . II 1066 . III	19 31 31 33 37	Argus Cancri  Pixid Naut. β Monocer. r	$ \begin{vmatrix} 5 = - &   5 \\ 5 = 7.75 &   5 \\   11 = 51.15 &   5 \end{vmatrix} $	3=57,65 2=45,33 3= 6,91 3=51,47 3=48,86	-58 58 57,65 +20 6 45,33 +20 7 7,51 -34 43 51,23 - 6 38 50,13	12,206 12,249	- ,16 - ,11 - ,10 + ,02	A great number of stars at this spot has created much confusion;—these must be re-examined. Differs above 23° from G. C.
1080 . II 646 . IV 1124 . II 1121 . III 1136 . III	9 0 7 9 15	Cancri Pixid Naut. Argus à Navis & Hydræ	$\begin{vmatrix} 3=47.03 & 3 \\ 8=41.23 & 4 \\ 4=26.28 & 3 \end{vmatrix}$	3 = 47,68 $4 = 43,02$ $3 = 25,32$	+18 36 30,09 -25 10 47,36 -61 38 41,68 -36 55 25,87 + 4 11 49,27	14,208	,13 ,02 ,11	

Reference.	A.R.	Names.	Mean Decn. Jan. 1836from	Concluded Mean Decn.	Annual Preces- P.	м.	Remarks.
No. Vol.			former obs. presen	Jan 1 1836	sion.		
1151 of II 1173 . III 1179 . II 1191 . II 1195 . II	H. M. 9 21 31 39 46 51	31 Hydræ rı 29 Ursæ Maj. v 9 Sextantis	5=21,58 3=19 3=31 13=15,46 3=14 5=52,22 4=50 4=54	,23   9 58 31,23 ,30   +59 48 15,24 ,96   + 5 42 51,66	-15,382 - 16,004 + 16,359 - 16,675 -	,08 ,18 ,25 ,10 ,10	Differs 5",6 from G. C.
1214 . II 1256 . III 1261 . II 1274 . II 1278 . II	10 2 16 29 36 37	34 Leonis  37 Leo. Min. l 42 n 51 Leonis m <sup>2</sup>	5=41,78 1=20,94 13=31,84 21=41,51 3=31 3=43 3=12	,23   + 9 36 20,41 ,88   +32 49 31,85 ,18   +31 32 41,72	18,058 — 18,488 — 18,723 +	,07 ,01	I have re-observed these stars merely with a view to determine their difference of Declination.
1279 . II 1288 . II 1289 . II 1329 . III 1353 . III	37 42 43 55 11 7	52 Leonis k 41 Sextantis r 46 Leo. Min. o 216 Urem Mij. 322 Leonis	5=47,46 3=49 3=44 1=22 4=26,85 3=26	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		,03 ,40 ,04	Differs 5",4 from G. C.
1375 . III 1407 . III 1416 . III 775 . IV 1371 . II	18 31 34 34 37	Leonis Hvd. & Crat. Hydræ V  Virginis	2=57 1= 8,11 4=15,26 4=17 5=57,62 2=31 3=31 3=55	.87 —12 16 10,18 .54 —31 35 16.40 .24 —31 34 31,24	19,718 + 19,887 — 19,912 — 19,913 — 19,943 —	,15 ,02 ,01	
1437 . III 1386 . II 1426 . II 808 . IV 1436 . II	46 52 12 17 19 21	338 Ursæ Maj. var. 8 Virginis π Crucis α <sup>1</sup> Virginis 18 Comæ Ber.	16=44,70	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	20,031 — 19,987 — 19,971	,05 ,04 ,20 ,27	A wrong star appears to have been observed in 1832.
1445 . II 1460 . II 1599 . III 1634 . III 1751 . III	25 30 52 13 8 59	20 Virginis 26 x Centauri 201 Comæ Ber. 634 Virginis	4=10,62   3= 8 =   3=28 2=39 2=55 3=37	.88 — 7 5 28,88 .72 —22 36 39,72 .43 +20 40 55,43	19,866 — 19,524 —1	,93 ,05	Probably an error of 1' in Piazzi or in this result. Piazzi has assigned the 9th mag. to this star whereas it is now of the 7th.
1795 . III 1664 . II 1667 . II 1668 . II 1669 . II	14 18 34 36 37 37	Bootis 32 ————————————————————————————————————	5= 2 4=18 2=33 2=33 2=51	.65   +12 22 18,65 .56   -24 44 33,56 .63   -20 28 33,63	15,566 — 15,545 —	,05 .22 ,16	
1676 . II 1680 . II 1685 . II 1695 . II 1696 . II	38 41 43 49 49	13 Hydræ Con. 8 Libræ α¹ Bootis 15 Hydræ z 1 Serpentis	3=15 	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15,280 — 15,204	,00 ,07	÷
1703 . II 1379 . III 1898 . III 1740 . II 1741 . II	54 56 15 5 11 12	Libræ 33 Ursæ Min. 97 Libræ 28 v 29 61	4=20 5=20 3=32 6=26 5= 9	.83   +75 32 20,83 .28   -17 48 31,89 .04   -17 33 26,04	14,571 — 14,410 — 13,835 + 13,458 — 13,441 —	,05 ,02 ,15	
1773 . II 1775 . II 1776 . II 1812 . II 1815 . II	28 28 28 45 45	Libree 16 Serpentis 18 —— r³ 3 Scorpii A*	5=33 5=48 5= 2 5= 8 5=35	,19   +10 33 48.19 ,88   +16 40 2,88 ,51   -24 45 8,51	12,343 — 12,317 — 12,294 + 11,174 — 11,117 —	,15 ,01 ,24	

<sup>•</sup> The difference of Declination here found. Jan. 1. 1886. = 1° 16′ 50′,1 from obs. on the same evening.

Do. from the Greenwich Catalogue. = 1° 16′ 55′,3

Reference.	A. R.	Names.		rn. Jan. 1, —from	Concluded Mean Decn.	Ann	ual	Remarks.
No. Vol.			former obs.		Jan. 1, 1836.	Precesn.	Р. М.	
1965 of III 1990 . III 1046 . IV 1058 . IV 2072 . III	нм. 1546 57 16 1 11 34	Lupi g Serpentis Scorpii	3=40,01 4=39,58 4=46,53 4=55,50	2=39,40 2=43.00 1=46,92 1=57,74 5=39,59	-33 28 39,77 -38 38 40,72 + 5 50 46,61 -19 42 55,95 -22 48 39,59	-11,014 10,187 9,966 9,167 7,333	+ ,05 - ,25 - ,07 - ,09 ,00	
1090 . IV 2097 . III 1942 . II 2127 . III 2142 . III	42 42 50 56 17 1	Scorpii 150 ——— Ophiuchi 117 —— Herculis	3=58,38 4= 6,33 3=37,00	3=37,89 2=61.00 2= 4,98 5=37.72 5=11,26	-41 32 37,89 -41 33 59,43 -17 59 5,88 +13 60 37,45 +27 19 11,26	6,603 6,614 6,040 5,502 5,052	- ,11 + ,10 - ,06 - ,19 + ,03	introduced through mistake into
1973 . II 1974 . II 1980 . II 1985 . II 1991 . II	7 7 11 11 15	39 Ophiuchi 66 Herculis 53 Serpentis 33 Scorpii		6= 0,57 4=59,97 4=55,38 3=22,59 2= 7,21	-24 6 0.57 -23 52 59.97 +11 2 55.38 -12 40 22.59 -24 5 7,21	4,538 4,531 4,285 4,229 3,934	- ,06 - ,08 - ,12 - ,02 + ,02	
1996 : II 1997 : II 1998 : II 2014 : II 2193 : III	17 18 18 25 27	73 Herculis 47 Ophiuchi 54	= 4,81°	2= 6,07 2=38,93 2= 9,66 3=45.74 2= 5,17	+23 7 6.07 -12 21 38,93 - 4 56 9,66 +13 16 45,74 +13 14 5,05	3,739 3,695 3,686 2,917 2,824	- ,04 - ,17 - ,21 - ,07 -1,78	C Pierri's Declination is probably 1/ too
2015 . II 2018 . II 2024 . II 1170 . IV 2026 . II	27 28 29 30 31	53 Ophiuchi f Serpentis Sagittarii Ophiuchi 79 Herculis	4=46,71	3= 8,77 2=50,14 2= 1,02 1=46,76 2=44,41	+ 9 42 8,77 -15 27 50,14 -32 7 1.02 +11 45 46,72 +24 24 44,41	2,915 2,802 2,708 2,651 2,572	- ,19 - ,12 + ,07 + ,03 - ,12	
2209 . III 2033 . II 2034 . II 2214 . III 1185 . IV	34 34 34 35 35	142 Draconis Ophiuchi Draconis 83 Herculis	3= 4,61	2=48.06 1=46.94 1= 5.22 1=14.11 3= 5.50	+62 33 48,06 -22 6 46,94 +16 2 5,22 +68 13 14,11 +24 39 5,06	2,286 2,256 2,239 2,170 2,101	- ,01 - ,06 + ,17 - ,06 - ,18	
2221 . III 1191 . IV 2222 . III 2042 . II 2226 . III	38 38 38 38 41	Ophiuchi Sagittarii Ophiuchi	2=22,99	1=10.71 1=23.14 2=37,29 1=17.29 1=44,07	+ 5 46 10.71 +25 47 23.04 + 5 50 37,29 -31 38 17,29 + 5 45 44,07		+ ,17 - ,04 - ,07 - ,03 - ,11	
2229 . III 2231 . III 2235 . III 2237 . III 2239 . III	41 42 43 43 44	Telescopii 339 Herculis 290 Ophiuchi Tauri Pon. 297 Ophiuchi	3=47,19	3=44,78 2=47,14 2=14,46 1=44,30 1= 8,85	-34 44 45,98 +19 18 47,14 -19 4 14,46 + 5 16 44,30 + 1 21 8,85	1,497 1,468	- ,03 - ,11 - ,14 ,00	
2248 . III 2252 , III 2254 . III 2257 . III 2062 . II	46 47 48 51 51	302 Ophiuchi 357 Herculis 7 Tauri Pon. 172 Serpentis 6 Sagittarii		1=54,01 2=52,97 1= 5,91 1=56,00 1=36,15	-18 45 54,01 +24 48 52,97 + 0 42 5,91 - 4 47 56,00 -17 8 36,15		- ,01 - ,09 - ,03 - ,23 - ,08	
2063 . II 2261 . 11I 2067 . II 2074 . II 2078 . II	52 52 53 53 55	Sagittarii 19 —— a 9 —— a		1= 3,50 1=41,60 2=21,94 2=21,34 2=55,34	-22 46 3,50 -22 53 41,60 -24 16 21,94 -24 21 21,34 -24 23 55,34	0,734 0,630 0,663 0,573 0,460	- ,02 + ,02 - ,05 - ,02 - ,06	

Reference.	A. R.	Names.	Mean Decn. Je 1836from			cluded n Decn.	Ant	nual		Remarks.
No. Vol			former obs. prese	nt obs.		1, 1836.	Precesn.	P.	M.	
2269 of 111 2276 . III 2278 . III 2283 . III 2305 . 111	59 18 0 1	Ursæ Min. Sagittarii 406 Herculis	2= 3= 3= 2= 2= 2=	=33,66 =17,25 =51,34 =42,32 = 7,67	$-24 \\ +42 \\ +26$	35 33,66 0 17,25 56 51,34 4 42,32 47 7,67		+   +	,19 ,02 ,07 ,30 ,08	Piazzi gives P. M. = -0*,30
2118 . I 2123 . I 2126 . I 2127 . I 2132 . I	18 20 20	21 Sagittarii Sagittarii ———————————————————————————————————	5=18,49   1=   4=	=20,18 =28,75 =16,11 =59,30 =25,31	-17 4 -33 -14	37 20,18 47 28,75 5 18,10 40 59,30 30 25,31	1,759	<u>-</u>	,09 ,07	Differs 43" from A.S.C.and too faint for the star intended—*
2318 . II 2135 . I 2139 . I 2140 . I 2150 . I	23 23 23 23	Cor. Aust. x Sagittarii v² 61 Serpentis e Sagittarii	3= 3= 2=	= 0,19 =44,45 =46,70 =48,73 =31,87	-33 - 1 -18	49 59,89 7 44,45 6 46,70 28 48,73 31 31,87	1,991 2,024 2,026	=	,05 ,02 ,06 ,02 ,16	
2151 . I 2152 . I 2153 . I 2157 . I 2202 . I	28 28 32	Clypei Sob. Sagittarii Herculis 26 Sagittarii	3= 2= 4=	=45,74 = 9,31 =22,89 =39,82 =45,03	-23 +23 -23	21 45,74 38 9,31 28 22,89 58 39,82 16 45,03	2,457 2,480 2,745	-	,00 ,02 ,51 ,02 ,07	·
2212 . I 2215 . I 2217 . I 2248 . I 2249 . I	58 58 1 19 12	Sagittarii  44 —	3=	=24,09	-24 19  18	52 51,14 54 24,09 32 24,41 8 51,52 13 ——	5,006 5,042	=	,07 ,11	This star has been looked for frequently but not observed yet.
2250 . I 2251 . I 2261 . I 2262 . I 2263 . I	1 12 1 16 1 17	45 Sagittarii ρ² 46 — υ		=16,82 =21,59 =38,77 =20,49 =31,32	-16 -30 -15	36 16,82 15 21,59 3 38,77 22 20,49 37 31,32	6,192 6,540 6,567	=	,08 ,09 ,17 ,17	
2264 . 1 2267 . 1 2427 . 11 2457 . 11 2465 . 11	18 20 35	Sagittarii 2 Cygni a 19 Draconis Aquilæ v	$\begin{vmatrix} 3 = 7,05 & 1 = 3 = 2 = 2 = 3 = 3 = 3 = 3 = 3 = 3 = 3$	=10,82	+29  +49  +69	52 13,87 18 17.51 57 8,93 26 1,67 13 17,85	6,642 6,784 8,057	  -  +	,14 ,08 ,09 ,38 ,06	
2264 . II 2326 . I 2478 . II 2482 . II 2483 . II	42 45 46	73 Cygni 51 Aquilæ D 187 ————————————————————————————————————	3=44,13 2= 3=50,00 1=	=46,52 =23,97 =46,30 =51,01 =49,91	-11  +11  - 8	8 46,28 10 23,97 13 45,00 38 50,25 54 52,68	8,582 8,828 8,938	—   +	,28 ,08 ,27 ,01 ,16	·
2494 . II 2510 . II 2528 . II 1519 . II 2539 . II	I   59 I  20 6 V   6	Sagittarii H Draconis e <sup>1</sup> Aquilæ Sagittarii I <sup>1</sup>	3=50,69 2=	= 9,39 =47,85 =51,68 =28,54 =30,89	+64 +63 +15	23 9,19 21 47,85 13 51,09 36 28,54 33 30,89	10,001 10,373 10,434	+   +	,08 ,02 ,00 ,15	These observations were omitted in the Catalogue.
2575 . I	1 27 1 28 1 31	Ursæ Min. A 28 Vulpeculæ	2=13,46   1: 3=   1: 2:	=11,70 =57,35 =43,59	+48 +88 +23	43 17,41 40 12,87 48 57,35 32 43,59 13 44,51	11,926 5 11,852 6 12,279	+   +   +	,02 ,04 ,06 ,07 -,03	

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### SUPPLEMENTARY CATALOGUE

Refe	Reference.		Names.	Mean Decn. Jan. 1, 1836.—from		Concluded Mean Decn.	Annual Preces-	Р. М.	Remarus.
No.	Vol.			former obs.	present obs.	Jan. 1, 1836.	sion.		
2495 2649 2664	. III	H. M. 20 44 54 59 21 6 19	Cephei 2 Equulei λ Vulpeculæ Aquarii	5=25,08 ====================================	2=43,74 3=24,46 1=36,31 1=40,14 2=22,84	0 / * + 44 58 43,74 + 6 32 24,85 + 22 55 36,31 - 7 45 40,14 - 12 47 22,16	13,785 14,164 14,563	$\begin{vmatrix} - ,02 \\ - ,03 \end{vmatrix}$	
2688 2691 2706 2565 2568	. III . III	19 21 27 29 32	Cephei Vulpeculæ z Aquarii 4 Pegasi T 42 Capricorni d 1	4=53,44 6= 2,89	2=18,87 1=52,82 1= 3,26 2= 3,07 3=32,16	+5° 14 18,87 +26 53 53,31 + 0 15 3,26 + 5 2 2,98 -14 46 32,16	15,387 15,751 15,902	- ,01 - ,19 - ,14	Differs 9° from A. S. C. Piazzi gives P. M.—0°,38.
2757 2775 2774 9648 2678	i . 111 3 . 11	22 4 4 5	Piscis Aust. Cephei Gruis   53 Aquarii  E1		3=31,94 1=56,61 2=28,69 3=31,12 4=22,19	-30 41 31,94 +58 2 58,35 +58 29 29,17 -42 9 33,56 -17 34 22,19	17,510 17,496 17,586	+ ,05 ,00 - ,08	
2689 2699 2824 2833 2850	9 . II 5 . II	27 27 1 29	17 Piscis Aust. A 61 Aquarii L Piscis Aust. 7 Andromedæ 222 Aquarii	, -, -,	1= 0,27 1=12,21 2=29,80 4=14,06 1=15,66	-33 11 1,70 -18 18 13,64 -32 30 29,15 +38 47 14,53 -10 30 15,12	18,402 18,434 18,478	+ ,09 + ,03 - ,07	
		I 51 I 59	Aquarii 7 Piscium	4=45,87 4=28,16 5=13,24	2=45,06 2=25,15 4=12,52 2=12,84	-27 1 27,16 -29 42 12,59	19,1 <i>5</i> 19,3 <i>5</i>	7 - ,11 3 + ,36	

One remark is here necessary with regard to the foregoing Catalogue,—namely, that the precessions in Declination are those copied from the Vols. already printed; and consequently pertain to the epochs for which those tables were constructed, and not to the year 1836, to which the places of the stars are reduced: with a view to remedy this defect, as well as to supply an every day want of the practical Astronomer, 1 have computed the following tables.

A Table of the annual variation of the Precession in Right Ascension in time.

arg at top the Declination and at the side the A. R. of the Star.

Decl	in l			top the	 	l		1	<u> </u>			Declin.
Nor	_	Oo	30º	500	600	650	700	750	780	800	820	South.
н.	M.	8.	8.	s.	8.	8.	8.	8.	8.	s.	8	н. м.
0	0	,0000	+,0001	十,0003	+,0004	+,0006	+,0008	+,0011	+,0014	+,0017	+,0021	XII 0
l	30	. 00	, 02	. 04	. 06	. 08	11. 11	, 16	, 22	, 28	. 38	30
I	0		ໄ ໌ ດວ	04	. 07	, 10	, 13	. 20	່ ດດ	27	54	XIII 0
1	30	. 00	, 02	, 04	07	ii	, 15	22	24	45	66	30
11	_	. 00	, 02		. 07				. 37	. 52		
11	0			, 05		, 12	, 16	, 25			, 76	XIV 0
1	30	, 00	, 03	, 05	, 08	, 12	, 17	, 27	, 39	, 54	, 80	30
				'								
III	0	,0000	十,0003	+,0005	+,0008	+,0012	+,0017	+,0027		+,0055	+,0081	XV 0
1	30	, 00	, 02	, 05	, 08	, 11	, 16	, 26	, 38	, 52	, 78	30
IV	0	, 00	, 02	, 04	, 07	, 10	, 15	, 21	, 33	, 45	, 68	XVI 0
1	30	, 00	, 01	, 03	05	, 08	, 12	. 17	, 26	, 37	. 54	30
v	0	, 00	. 01	. 02	. 03	, 05	. 07	1 12	. 18	. 26	, 38	XVII 0
I	30	, 00	. 00	, 01	. 01	V3	. 04	1 07	′ 00	, 13	, 20	30
}		, ,	, ,	,	,	, 05	, ,,	, "	, 03	,	,	"
VI	0	,0000	,0000	_,0000	-,0000	0000	,0000	_,0000	,0000	<b>—,0</b> 000	_,0000	XVIII 0
1 ''	30	` ^^	00	ו ה	. 02	່ ດວ	-,0000	07		12	. 00	30
VII	0	1 00	, 00	, 01	, 02		. 08	, 07	, 09	1 06	. 20	
111		,	. ,		, ,	, 05		•	, 18			
	30	, 00	, 02	, 03	, 05	, 07	, 11	, 17	, 26	, 37	, 54	30
VIII	0	, 00	', 02	, 04	, 07	, 09	, 14	, 21	, 33	, 45	, 68	XX 0
ŀ	30	, 00	, 03	, 05	, 08	, 11	, 16	, 26	, 38	, 52	, 78	30
1				<b>?</b> :					9	i	Į.	
IX	0	,0000	,0003	-,0005	,0008	<b>,</b> 0012	,0017	,0027	-,0040	—,0055 ¦	—,0081¦	XXI 0
l	30	, 00	, 03	, 05	, 01	, 12	, 17	, 27	, 39	, 54	, 80	30
X	0	, 00	. 02	. 04	, 07	, 11	. 17	, 25	, 37	, 52	, 76	XXII 0 İ
	30	. 00	. 02	. 04	, 07	, 10	. 15	, 22	24	, 45	, 66	30
XI	ō	′ 00	1 09	. 04	06	. 09	, 13	20	, 29	27	EA	XXIII 0
_ A.	30	, 00	, 02	, 03	0.5	07	. 10	16	, 23	( 00 )	20	30
	30	, 00	, 02	, 00	, 00	, 07	, 10	, 10	, 22	, 20	, 30	30
XII		,0000	-,0001	_,0002	,0003	,0005	,0007	0011	0014	,0017	_,0021	0 0
AII								<b>—,0011</b>	<b>-,0014</b>	_, 06	_, 0021 _, 05	
*****	30	, 00	—, Ul	<b>-,</b> 01	<b>—,</b> 02	<b></b> , 03	<b>-,</b> 04	<b>—,</b> 06	<b>—</b> , 06	ایم ' ب		30
XIII	-	, 00	<b>-</b> , 00	, 00	, 00	, 00	, 00	, 00	+, 01	+, 04	+, 11	I 0
	30	, 00	+, 00	+, 00	+, 01	+, 02	+, 02	+, 03	+, 07	+, 14	+, 26	30
XIV	0	, 00	+, 00	+, 01	+, 02	+, 03	+, 03	+, 06	+, 13		+, 38	II 0
	30	, 00	+, 00	+, 01	+, 02	+, 03	+, 04	+, 07		+, 24	+, 47	30 }
l				·			` '		, ,		İ	1
XV	0	,0000	+,0001	+,0002	+,0003	+,0004	+,0005	+,0009	+,0017	+,0026	+,0050	III O
l	30	, 00	. 01	. 02	, 03	1 05	, 06	, 10	17	27	49	30
XVI		. 00	. 01	. 02	. 03	0.5	0.7	, 11	. 18	, 28	47	IV 0
``	30	. 00	. 01	, 02	03	1 04	. 06	. 10	, 16	04	39	30
XVII		. 00	. 00	, 01	, 02	03		. 07		17	. 28	v ő
AVII		•	,			,	, 04	,	, 12	, 09	. 14	
l	30	, 00	, 00	, 01	, 01	, 02	, 02	, 04	, 06	, 09	, 14	30
V		0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	771 ^
XVIII		,0000	<b> ,0000</b>	_,0000	,0000	-,0000	-,0000	,0000	-,0000	-,0000	<b>—</b> ,0000	VI 0
}	30	, 00	, 00	, 01	, 01	, 02	, 02	, 04	, 06	, 09	, 14	30
XIX		, 00	, 00	, 01	, 02	, 03	, 04	, 07	, 12	, 17	, 28	VII 0
!	30	, 00	, 01	, 02	, 03	, 05	, 06	, 10	, 16	, 24	, <b>3</b> 9	30
XX	. 0	, 00	, 01	, 02	, 03	, 05	, 06	j , 10	, 18	, 28	, 47	VIII 0
ł	80	, 00	, 01	, 02	, 03	, 05	, 06	, 10	, 17	, 27	, 49	30
1		'		1	1	,				,	-	ľ
XXI	0	,0000	-,0001	-,0002	-,0003	-,0004	<b>—,000</b> 5	,0009	,0017	-,0026	<b>—,005</b> 0	IX 0
1	30	, 00	, 01	. 02	, 03	, 04	, 05	, 08	, 16	, 24	, 47	30
XXII		` ^^	i	, 01	, 02	. 03	$\Lambda_{A}$	06	13	่ากไ	ຳວວ	x o
l ""			1 .				່ ^ ດວ	1 -		14	. 26	30
VV111	30	, 00	, 00	<b> ,</b> 01	, 01	, 02	, 02	, 04	, 07	•		
XXIII		, 00		, 00	, 00	, 00	, 00	, 00	, 01	, 04	, 11	XI 0
ł	30	, 00	+, 00	1+, 01	+, 02	<u> +, 03</u>	+, 04	+, 06	+, 06	+, 06	+, 05	30

A Table of the annual variation of the Precession in Declination arg at top the Declination, at the side the A. R. of the Star.

arg at top the Declination, at the side the A. R. of the Star.											
Declin. North.	O•	300	500	600	650	700	750	780	800	820	Declin. South.
H. M. XII 0 30 XIII 0 30 XIV 0 30	*. +,0000— , 06 , 11 , 17 , 22 , 27	*. +,0000— , 05 , 10 , 15 , 20 , 23	s. +,0000— , 05 , 10 , 14 , 17	s. +,0000— , 05 , 09 , 12 , 14 , 15	*. +,0000— , 05 , 08 , 10 , 11 , 11	*. +,0000— , 05 , 08 , 09 , 09 , 08	1	s. +,0000— +, 04— +, 05— +, 03— —, 01+ —, 07+	+, 04-	*. +,0000 +, 03 +, 02 , 03+ , 12+ , 24+	H. M. O 0 30 I 0 30 II 9 30
XV 0 30 XVI 0 30 XVII 0 30	+,0032- , 36 , 39 , 41 , 43 , 44	+,0026— , 28 , 30 , 32 , 33 , 33	+,0020— , 21 , 21 , 21 , 22 , 22	+,0015— , 14 , 13 , 13 , 12 , 12	+,0011— , 10 , 09 , 07 , 04 , 04	+,0005— +, 02— -, 01+ , 04 , 07 , 08	-,0005+ , 11 , 16 , 20 , 24 , 26	-,0014+ , 22 , 30 , 36 , 41 , 44	-,0023 + , 34 , 45 , 54 , 60 , 63	-,0037+ , 51 , 65 , 78 , 86 , 92	III 0 30 IV 0 V 0 30
XVIII 0 30 XIX 0 30 XX 0 30	+,0045— , 44 , 43 , 41 , 39 , 36	+,0033— , 33 , 33 , 32 , 30 , 28	+,0022— , 22 , 22 , 21 , 21 , 21	+,0012— , 11 , 12 , 12 , 13 , 14	+,0003— , 03 , 04 , 06 , 09 , 10	-,0009+ , 08 , 07 , 04 , 01 , 02	-,0028+ , 26 , 24 , 20 , 16 , 11	-,0047+ , 44 , 41 , 36 , 30 , 22	-,0066+ , 63 , 60 , 54 , 45 , 34	,0093+ , 92 , 86 , 78 , 65	VI 0 30 VII 0 30 VIII 0 30
XXI 0 XXII 0 XXIII 0 30	+,0032— , 27 , 22 , 17 , 11 , 06	+,0026— , 23 , 20 , 15 , 10 , 05	+,0020— , 19 , 17 , 14 , 10 , 05	+,0019— , 14 , 14 , 12 , 09 , 05	+,0011— , 11 , 11 , 10 , 08 , 05	+,0005— , 08 , 09 , 08 , 08 , 05		-,0014+ -, 07+ -, 01+ +, 03- +, 05- +, 04-	-,0023+ -, 14+ -, 06+ , 00 +, 04- +, 04-	, 24+ , 12+ , 03+ +, 02-	IX 0 30 X 0 30 XI 0 30
O 0 30 11 0 30 30	-,0000+ , 06 , 11 , 17 , 22 , 27	-,0000+ , 06 , 12 , 18 , 25 , 31	-,0000+ , 06 , 13 , 20 , 28 , 35	-,0000+ , 06 , 14 , 22 , 31 , 40	-,0000+ , 06 , 14 , 23 , 33 , 43	-,0000+ , 07 , 15 , 25 , 36 , 47	0000+ , 07 , 16 , 27 , 40 , 54	-,0000+ , 08 , 17 , 30 , 45 , 60	-,0000+ , 08 , 19 , 34 , 50 , 68	-,0000+ , 09 , 21 , 38 , 57 , 79	XII 0 30 XIII 0 30 XIV 0 30
III 0 30 IV 0 30 V 0 30	-,0032+ , 36 , 39 , 41 , 43 , 44	-,0038+ , 43 , 48 , 52 , 55 , 56	-,0043+ , 50 , 56 , 61 , 65 , 67	-,0049+ , 57 , 64 , 70 , 75 , 77	-,0052+ , 61 , 70 , 77 , 82 , 85	-,0058+ , 68 , 79 , 88 , 93 , 97	-,0068+ ,081 ,093 ,103 ,111 ,116	-,0076+ , 091 , 106 , 119 , 130 , 135	-,0086+ , 104 , 121 , 134 , 146 , 152	-,0101+ , 121 , 140 , 156 , 170 , 180	XV 0 30 XVI 0 30 XVII 0 30
VI 0 30 VII 0 30 VIII 0 30	-,0045+ , 44 , 43 , 41 , 39 , 36	-,0057+ , 56 , 55 , 52 , 48 , 43	-,0068+ , 67 , 65 , 61 , 56 , 50	,0078+ , 77 , 75 , 70 , 64 , 57	,0086+ , 85 , 82 , 77 , 70 , 61	-,0098+ , 97 , 93 , 88 , 79 , 68	-,0117+ , 116 , 111 , 103 , 093 , 081	-,0136+ , 135 , 130 , 119 , 106 , 091	,01 <b>5</b> 5+ , 152 , 146 , 134 , 121 , 104	,0183+ , 180 , 170 , 156 , 140 , 121	XVIII 0 30 XIX 0 30 XX 0 30
IX 0 30 X 0 30 XI 0 30	-,0032+ , 27 , 22 , 17 , 11 , 06	-,0038+ , 32 , 25 , 19 , 12 , 06	-,0043+ , 35 , 28 , 20 , 13 , 06	,0049+ , 40 , 31 , 22 , 14 , 07	-,0052+ , 43 , 33 , 23 , 14 , 06	,0058+ , 47 , 36 , 25 , 15 , 07	-,0068+ , 54 , 40 , 27 , 16 , 07	-,0076+ , 60 , 45 , 30 , 17 , 08	-,0086+ , 68 , 50 , 34 , 19 , 08	-,0101+ , 079 , 057 , 038 , 021 , 009	XXI 0 30 XXII 0 30 XXIII 0 30

In Vol. III. is given the Mean of the Proper Motions of all the Stars in the Catalogue, (3005 in number) both in Right Ascension and Declination: and from what there appeared to be—a tendency to exhibit a general proper motion in the whole system of Stars, or more simply, a movement of the Solar System in space, I have been induced to follow up the enquiry with the 2066 Stars which occur in the present volume, and have in a similar manner brought about 2600 Stars from the Catalogue of Volume II., to bear upon the same subject; how far these have succeeded in establishing this point will appear presently;—in the mean time, it may be proper to remark, that in an investigation of this nature, we may imagine that every star is affected with true\* Proper Motion, more or less: some Proper Motions from their magnitude, are at once recognized, whilst others from their minuteness, are lost sight of in the errors incident to observations:—we may expect however among the latter class, that—occurring indifferently + or — as the larger proper motions do,—the mean among a great many Stars would approximate to zero, and thereby leave disengaged any apparent Proper Motion which might exist; accordingly in the table which now follows, I have given the mean of all the Proper Motions in Right Ascension for each hour of A. R., omitting only those alluded to in the column "P.M. Stars;"—those Stars in fact whose proper motion exceeds all possible limits of error of observation; thus; - the largest error of A. R. found in the Madras Results was in the case of 169 Ceti, which differed 0,52s. in 1835, from the place determined in 1832: should the whole of this amount in the way of error, apply to one of the determinations; and should an error to the same amount but contrary direction occur in Piazzi's Catalogue, it would give rise to an error +,  $\frac{52 + .52}{t}$  in the observed P. M. (t being the date of the Catalogue since 1800); in addition to this, we must take account of the fact, that the Equinoctial Point assumed by Piazzi in the construction of his Catalogue, was the same as that employed by Dr. Maskelyne; whereas we have employed a zero point 0,20s, behind this; hence the comparison of our Catalogue with Piazzi's, ought to exhibit a P. M. in Right Ascension to the amount  $\frac{+, 20s}{t}$ ; combining this with the above, we may safely assume,—that in either Catalogue—any value found in the Column "P. M. in A. R." which exceeds the limits  $\frac{+1,24s}{t}$  and  $\frac{-0.84s}{t}$ , is more or less the effect of Proper Motion, notwithstanding the errors of observation: thus we have

By the term "true" Proper Motion is meant an actual movement of the Star in space with reference to any point we may consider fixed; whereas apparent Proper Motion is such as would result from a movement of the Sciar System.

### PROPER MOTION OF THE FIXED STARS.

A TABLE of the Proper Motions of the fixed Stars in A. R.

	A TABLE of the Proper Motions of the fixed Stars in A. R.													
7	Vol. II.	for 1832 (2881 St	tars.)	Vo	l. III. for 1835 (30	003 Stars.)	Vo	l. IV. for 1836 (20	066 Stars)					
A. R.	P. M. Stars.	No. and sum of + & — P. M.	Mean $\frac{20}{t}$ (0063)	P. M. Stars.	No. and sum of + & - P. M.	Mean $\frac{-,90}{t}$ (-,0057)	P. M. Stars.	No. and sum of + & — P. M.	Mean $\frac{-,20}{t}$ (-,0056)	General Mean P. M.				
н. м.		8.	8.	<u>                                     </u>	 	8.	!	s	8.					
0	7	90 = +1,152 $7 = -0,041$	} +,0051	7	60 = +0.912 $11 = -0.077$	+,0061	1	$   \begin{array}{c}     114 = +1,358 \\     8 = -0,026   \end{array} $	+,0053	+,0054				
I	4	87 = +1,0.5 $12 = -0,077$	+,0039	8	87 = +1,081 $15 = -0,109$	+,0038	3	63 = +0,897 3 = -0,025	+,0076	+,0047				
11	6	91 = +1,260 9 = -,049	+,0058	7	61 = +0,661 37 = -0,318	,0022	1	51 = +0.178 5 = -0.032	+,0059	+,0027				
111	2	93 = +1,154 $10 = -0,065$	+,0043	4	69 = +0,701 $28 = -0,177$	<b>}</b> -,0003	0	45 = +0.579 8 = -0.048	+,0044	+,0025				
IV	6	126 = +1,608 7 = -0.037	+,0055	5	95 = +0,928 26 = -0,175	+,0005	3	44 = +0,682 $12 = -0,091$	+,0050	+,0036				
v	5	127 = +1,313 $12 = -0.082$	+,0025	2	$ \begin{array}{c c} 116 = +1,009 \\ 28 = -0,201 \end{array} $	} -,0002	2	63 = +0.745 $7 = -0.045$	+,0044	+,0017				
VI	3	104 = +0,979 8 = -0,039	+,0021	9	$   \begin{array}{c}     122 = +1,185 \\     32 = -0,240   \end{array} $	_,0004	3	56 = +0.784 6 = -0.027	+,0066	+,0019				
VII	2	90 = +0.761 12 = -0.065	<b>}</b> +,0005 ·	7	$ \begin{array}{c c} 123 = +1,154 \\ 23 = -0,166 \end{array} $	+,0011	3	54 = +0.063 8 = -0.086	+,0037	+,0015				
VIII	2	77 = +0.748 $16 = -0.104$	+,0017	3	79 = +0.918 31 = -0.280	+,0001	2	57 = +0,695 6 = -0,042	+,0048	+,0019				
IX	4	83 = +0,677 $10 = -0,072$	+,0013	6	73 = +0,709 30 = -0,189	_,0007	1	54 = +0,651 9 = -0,051	+,0041	+,0012				
х	1	74 = +0.811 15 =107	+,0016	7	84 = +0.907 29 = -0.276	_,0001	2	36 = +0,557 4 = -0,922	+,0067	+,0016				
ХI	3	66 = +0,674 8 = -0,089	+,0016	7	$ 97 = +1,128 \\ 41 = -0,348 $	,0000	1	42 = +0.531 6 = -0.021	+,0050	+,0019				
XII	4	72 = + ,620 $14 = - ,108$	<b>}</b> -,0003	ó	115 = +1,233 19 = -0,198	} +,0023	1	45 = +0.635 5 = -0.030	+,0063	+,0023				
XIII	6	67 = + ,532 $21 = - ,183$	,0023	2	$   \begin{array}{c c}     105 = +1,086 \\     32 = -0,244   \end{array} $	} +,0004	6	$   \begin{array}{c c}     68 = +0.730 \\     7 = -0.080   \end{array} $	+,0033	+,0003				
XIV	2	69 = + ,653 $18 = - ,124$	,0002	4	98 = +0,969 33 = -0,195	+,0002	2	47 = +0.470 6 = -0.032	+,0028	+,0006				
xv	3	80 = + ,747 9 = - ,043	+,0016	4	82 = +0,846 $18 = -0,146$	+,0013	1	52 = +0.520 5 = -0.062	+,0024	+,0016				
xvi	4	72 = + ,609 $16 = - ,109$	_,0006	0	$\begin{array}{c c} 85 = +0,721 \\ 48 = -0,358 \end{array}$	} -,0030	0	55 = +0,549 8 = -0,039	} +,0025	<b></b> ,0010				
xvII	4	$84 = \pm 0,772$ 17 = -0,069	+,0007	3	82 = +0,754 39 = -0,280	} -,0018	2	$   \begin{array}{c}     104 = +1.272 \\     13 = -0.093   \end{array} $	<b>}</b> +,0044	+,0010				
xviii	4	92 = +0.883 $12 = -0.057$	+,0017	5	81 = +0.718 22 = -0.185	_,0005	4	82 = +0,926 12 = -0,091	<b>}</b> +,0033	+,0015				
XIX	6	114 = +1,192 $12 = -0,062$	+,0027	4	97 = +1,005 24 = -0,186	<b>}</b> +,0011	1	142 = +1,654 16 = -0,109	} +,0042	+,0028				
xx	7	100 = +1,134 $17 = -,104$	+,0025	10	97 = +1,150 16 = -0,117	+,0034	4	$   \begin{array}{c}     193 = +2,292 \\     18 = -0,122   \end{array} $	} +,0047	+,0038				
x <i>x</i> I	3	98 = +1,205 $13 = -0,057$	} +,0041	5	96 = +1,227 $12 = -0,104$	+,0047	22	$   \begin{array}{c}     144 = +1,873 \\     19 = -0,117   \end{array} $	+,0052	+,0048				
XXII	4	104 = +1,274 10 = -0,039	} +,0045	13	89 = +1,047 $11 = -0,049$	+,0041	4	72 = +0.910 $6 = -0.025$		+,0047				
XXIII	2	97 = +1,162 8 = -0,039	+,0044	9	$ 94 = +1,259 \\ 13 = -0,101 $	+,0051	4	57 = +0,799 $7 = -0,029$	+,0064	+,0053				
				<u> </u>	1		11							

On inspecting the several columns in the above table, we perceive (as indeed might have been expected), that the errors incident to observation, combined with the chance excess of + or — true Proper Motion—exert a very powerful sway over our results; examining the column "Mean," there is however a determination to plus maximum in the neighbourhood of O hours, which is certainly not the effect of chance:—on referring to the formulæ for the Precession in Right Ascension (c).

$$c = + 46,021 + 20,043 \sin a \tan \delta$$

it is at once evident, that although a slight modification of the assumed General Precession of the Equinoxes may be necessary; still the cause of variation throughout this column remains unexplained: with regard to the effect of error in the Precession upon this table; it is necessary to know approximately, the situation of the stars observed: on referring to the Catalogues, it will be found that they are pretty evenly distributed, and that about one half of the whole number in each hour, is situated within  $\pm 20^{\circ}$  of Declination; thus,

							_		_			_
if between	_	<b>4</b> 5º	and		<b>4</b> 0º	of	Dec	clination	there	are	26	Stars
then	—	<b>4</b> 0	_		30			`		_	42	
	_	30			20		<b>-</b>				31	
		20	_		10		_			_	40	
	_	10			0		-		-	_	72	
	_	0		+	10					<b>-</b> 1	00	
	+	10	_	+	20		_			- 1	00	
	+	20	_	+	30					_	88	
	+	30	_	+	<b>4</b> 0					_	47	
	+	40		+	50					-	55	
	+	50		+	60					_	<b>4</b> 2	
	+	60	_	+	70		_			-	86	
	+	70		+	80		-			-	20	
	+	80	_	+	90					_	4	
												_
										7	703	

If we now compute for each hour of A. R.—the change of annual precession due to each of these 703 Stars from a change of 1° in the value of the General Precession in Longitude—and then take the means,—they will exhibit to a sufficient degree of accuracy, the *nature* of the corrections which apply to the column "Proper Motion in A. R." in case the Precession has been wrongly assumed; thus

Error of the Column "Mean P. M. in A. R." corresponding to an error of 1" in the General Precession in Longitude.

RIGHT ASCENSION.	error in time
h. m.	8.
O 30	= ,063
I 30	= ,065
II 30	,068
III 30	= ,070
IV 30	= ,071
V 30	= ,072
VI 30	= ,072
VII 30	= ,071
VIII 30	= ,070
IX 30	= ,068
X 30	= ,065
XI 30	= ,063
XII 30	= ,060
X111 30	= ,058
XIV 30	= ,055
XV 30	= ,053
XVI 30	= ,052
XVII 30	= ,051
XVIII 30	= ,051
XIX 30	= ,052
X <i>X</i> 30	= ,053
XXI 30	= ,055
XXII 30	= ,058
XXIII 30	= ,060
	-

Since then the disposition of the above numbers is not such as to explain the various values found in the column "Proper Motion in A. R.;" we will now consider what effect a motion of the Solar System in space would have upon the question: in the first place we notice with regard to its general effect—that there would be two opposite neutral points, situated in the axis of motion, and that at right angles to this—there would be a plane of maximum motion:—with regard to its effect upon our results for the A. R.—it is necessary to consider again the position of the Stars constituting the results: on consulting the table at page CXVII, it appears that the whole of the Stars may roughly be supposed—to be congregated about a circle of 15° of North Declination, or surrounding the pole at a distance of 75° from it: with this view of the subject, we perceive that our results should exhibit two zero points, and one of +, and another of —, maximum; and moreover, that the mean of the 24 results

should = 0; on taking the mean however, it comes out + s,0025: exhibiting with reference to the above table,—that the General Precession in Longitude should be increased 0",0416;\* If we now apply to our results the corrections due to this, and convert them into space, we have as follows—

Observed General Proper Motion of the Fixed Stars in A. R.

		•		•
A.	R.	P. M. Space		P. M. in arc of a great circle.
h.	m.	"		n .
0	30	+ 0420	or	+ ,0368
I	30	+ ,0315		+ ,0266
II	30	<b></b> ,0015		,0000
Ш	30	,0060		<b></b> ,0026
IV	30	+ ,0090		+ ,0101
v	30	,0195		,0139
· vi	30	,0165		<b>— ,</b> 0114
VII	30	<b></b> ,0225		,0173
VIII	30	<b></b> ,0135		,0101
IX	30	,0240		<b>— ,0190</b>
X	30	,0165		<b>— ,</b> 0127
XI	30	,0105		<b>— ,0</b> 076
XII	30	,0030		,0024
XIII	30	<b></b> ,0315		<b></b> ,0254
XIV	30	,0255		<b></b> ,0203
xv	30	,0090		,0077
XVI	30	,0495		,0393
XVII	30	<del></del> ,0165		<b> ,014</b> 0
XVIII	30	<b>— ,0</b> 09 <b>0</b>		<b></b> ,0076
XIX	30	+ ,0090		+ ,0089
XX	30	+,0240		+ ,0203
XXI	30	+,0345		+ ,0444
XXII	30	+ ,0345		+ ,0304
XXIII	30	+,0420		+ ,0368

The reduction into arc, has been effected with reference to the table at page CXVII on the supposition that the Declination of each group of Stars is constant, or the P. M. in arc = P. M. in space  $\times \left(\frac{26 \cdot \cos 42^{\circ} \cdot 30' + 42 \cdot \cos \cdot 35^{\circ} + 31 \cdot \cos \cdot 25^{\circ} + &c.}{703}\right)$ 

We will now leave the above table for the present, and proceed to take notice of the Annual Proper Motion in Declination. Taking the Means in each hour of A. R. we obtain as follows.



<sup>•</sup> Agreeable to the formulæ employed in deducing these three catalogues;—the Precession in A. R. for  $1830 = 46^{\circ},0206 + 20,0426$  sin. a tan.  $\delta$ , whereas it would appear from this result, that the proper formulæ is  $=46^{\circ},0587 + 20,0577$  sin. a tan.  $\delta$ 

### PROPER MOTION OF THE FIXED STARS.

A TABLE of the observed Proper Motion of the Fixed Stars in Declination.

	Vol. II. for 1832;—2881 Stars.   Vol. III. for 1834;—3003 Stars.   Vol. IV. for 1836;—2066 Stars.											
		1					11	1				
A. R.	P. M. Stars.	No. and sum of + & - P. M.	Mean.	P. M. Stars.	No. and sum of + & — P. M.	Mean.	P, M. Stars.	No. and sum of + & - P. M.	Mean.			
н. м.		"	*		7	7			*			
0	6	32 = + 2,10 $67 = -6,30$	<b>—, 0424</b>	5	29 = + 0.99 43 = -3.73	,0381	1	43 = + 2.03 $80 = -6.19$	,0338			
I	7	41 = + 2,11 $52 = -5,41$	<b>— ,0355</b>	2	48 = + 2.28 $60 = -5.37$	,0286	2	30 = + 1,69 38 = -2,96	,0187			
11	9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0688	7	37 = + 2.51 61 = -5.97	,0353	2	29 = + 1,76 30 = -2,64	— ,0149			
111	3	27 = + 1.47 $72 = -6.39$	,0497	7	41 = + 1,90 62 = -5,03	-,0304	3	20 = + 1.19 30 = -2.55	,0272			
IV	9	32 = + 1.76 97 = -10.23	,0657	5	51 = + 3,19 $70 = -6,36$		2	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0087			
v	9	38 = + 1,95 $88 = - 9,04$	<b>— ,0563</b>	3	53 = + 3.96 $74 = -6.99$		4	38 = + 1,96 $30 = -2,00$	,0007			
VI	8	29 = + 2.37 $76 = -6.14$	,0359	10	72 = +4,56 $79 = -7,61$		1	28 = + 2.31 38 = - 3.22	,0138			
VII	2	32 = + 2,25 $69 = -6,41$	,0412	5	59 = + 2,96 89 = -7,49	,0306	1	33 = + 2.08 $33 = - 3.25$	,0189			
VIII	3	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0511	2	30 = + 1,70 $76 = -6,31$	,0435	2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_ ,0284			
IX	6	16 = + 1.32 $58 = -5.29$	,0536	3	31 = +1,36 75 = -5,55		1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0170			
x	5	20 = + 1,13 $62 = -6,60$	_ ,0667	2	39 = + 1,55 $79 = - 8,19$	,0563	2	$\begin{array}{c c} 11 = + 0.65 \\ 28 = -2.40 \end{array}$	,0449			
XI	5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0568	6	28 = + 1,45 92 = - 8,64	<b>}</b> — ,0599	1	6 = + 0.31 $36 = - 3.76$	,0821			
XII	5	22 = + 0.96 60 = -5.59		3	51 = + 3,47 87 = - 8,14	8880, —	2	10 = + 0.39 40 = - 4.46	,0814			
XIII	7	18 = + 0.95 $68 = -6.81$	,0681	2	46= + 2.57 90= - 7.45	<b>}</b> — ,0359	6	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	800, —			
XIV	13	21 = + 1,48 57 = -5,96	,0574	5	41 = +1,91 90 = -8,13	,0475	2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0642			
xv	18	23 = + 1,28 $70 = -6,48$	<b>}</b> ,0559	3	31 = +2.36 $72 = -6.27$	0380, —	1	16 = + 0.47 $41 = -4.12$	,0640			
xvi	9	24 = + 1.81 $73 = - 8.07$	,0645	6	38 = + 1,94 95 = -10,41	,0637	1	18 = + 0.84 $44 = -3.61$	,044o			
xvII	15	21 = + 1,32 $60 = -4,84$	,0435	10	32 = + 1.25 $76 = - 8.27$	,0650	6	27 = + 0.92 90 = - 8.13	,0616			
xvIII	19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0593	4	31 = + 1.73 76 = - 8.42	<b>}</b> - ,0625	1	15 = + 0.86 80 = -7.61	,0710			
XIX	19	29 = + 1,30 $82 = -7,88$	,0593	4	33 = + 1,90 80 = - 8,20	,0558	8	32 = +1,28 $119 = -11,28$	-,0662			
xx	6	40 = + 2.55 $78 = - 8.66$	- ,0535	5	43 = + 3.03 85 = - 9.12	,0476	4	52 = + 2.85 $158 = -14.87$	,0572			
XXI	12	26 = + 1.73 $75 = -7.65$	<b>— ,05</b> 86	2	33 = + 1,50 $78 = -7,76$	,0564	3	$\begin{vmatrix} 53 = +2.76 \\ 130 = -11.97 \end{vmatrix}$	<b>— ,0503</b>			
IIXX	9	27 = + 1.65 84 = - 8.36	,0605	4	45 = + 2.43 $67 = -5.85$	,0354	4	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	,0339			
XXIII	9	$\begin{array}{c} 27 = +1.77 \\ 72 = -6.26 \end{array}$	,0454	3	43=+ 2,59 70=- 5,58	- ,0265	4	24 = + 1.41 40 = -3.64	,0348			

Here we find all the results affected with the sign minus, which leads us to enquire what circumstances may affect the Palermo or Madras Observations to account for such a disposition; in the first place, the latitudes l, l' of Palermo or Madras, may be wrong; and in the next place the error of the tables of refraction will enter; added to which any error in the General Precession in Longitude, will affect each result by a quantity x. cos. A.R.; or each of the above results may possibly be erroneous to the amount  $\frac{dl+dl+dr+dr'}{t}$  + x, cos. A. R.; which put = S + x. cos. A. R.

With regard to the first of these terms, it will be observed—that its effect is constant throughout, for each catalogue; but would be larger upon that for 1832 than that for 1835 or 1836—in proportion to the value of t (the date since 1800); whereas the term depending upon the A. R., (which is common to each catalogue), being variable throughout the column, to the same extent +, as it is—, will be lost sight of on taking the mean of the 24 hours; thus—taking the mean for the 24 hours of the three catalogues we get

General Annual P. M. in Declination. = 
$$-0.0544 + \frac{8}{32.5}$$
  
=  $-0.0417 + \frac{8}{35}$   
=  $-0.0406 + \frac{8}{37}$   
 $\therefore 8 = +3.61$ 

With regard to the value of d l, we have no evidence to shew the extent of accuracy obtained, we only could have expected and wished, that the results of so great and good a catalogue as Piazzi's had in this respect been free from any serious error: the value of d l has already been found at page 73 to be—l"; which is probably within a tenth or two of a second of the truth: to form an estimate of the value d r; it may be safely assumed, that the *uncertainty* of refraction, for altitudes above  $10^{\circ}$ —varies as the amount of refraction itself, or nearly as the tangent of the zenith distance of the Star; if then with reference to the table at page cxvii, we compute the value

26 tan. 
$$41^{\circ}30' + 42$$
 tan.  $35^{\circ} + 31$  tan,  $25^{\circ} + &c.$ 

we find, that the uncertainty of refraction for the Palermo observations is such as would apply to a Star situated 43°,15 from the zenith; at which place, half a second is certainly the extreme limit of error, or  $dr = \pm$  ',5: with regard to the Madras results, the case is much more favorable, for the Stars are so evenly disposed on either side of the zenith, that it matters not what table

assigned to it by Piazzi.

of refractions had been employed; hence dr = 0 and we have found altogether  $S = 3'',61 = dl - 1'',0 \pm 0'',5 \pm 0 \cdots dl$  is between 4'',1 and 5'',1 or it would appear that the Latitude of Palermo is above 4'' less than that

A variation of above 4" however, and that built only upon very slender grounds,—cannot for the present be admitted; we will therefore subtract the mean result of each catalogue from its several constituents' values, and then combine the results according to their weight; when, putting s, for the true correction which remains to be applied to these to render them just; and x for any error which may result from a wrong assumption of the General Precession, we obtain as follows—

A. F	<b>է.</b>	General P. M. in Declination.	Cord. General P. M. in Declination.
A.	27.	No. 1.	No. 2.
0	30	s + 0078 + 991x	.0071
1	30	+ ,0172 $+$ ,923	+ ,0038
l II	30	+ ,0032 + ,793	<b>— ,0083</b>
111	30	+,0099+,608	+ ,0009
IV	30	+,0072+,382	+ ,0015
V	30	+,0146+,130	+ ,0127
VI	30	+,0216 - ,130	+ ,0235
VII	30	+ ,0139 $-$ ,382	+ ,0196
VIII	30	+ ,0037 ,608	+ ,0127
1 X	30	+ .0073793	+ ,0188
X	30	,0121,923	<b>↓</b> ,0013
l XI	30	-,0171 $-,991$	
IIX	30	-,0037-,991	+ ,0111
HIX	30	-0009 - 923	+ ,0126
XIV	30	— ,0111 — ,793	+ ,0004
XV	30	<b>—</b> ,0043 <b>—</b> ,608	+ ,0047
XVI	30	,0142382	
XVII	30	- ,0134 $-$ ,130	,0115
XVIII	39	-0.0190 + 0.130	
XIX.	30.	- ,0,160 $+$ ,382	,0217
XX	30	-0090 + 608	,0180
XXI	30	,0094+,793	,0209
XXII	30	+,0019+,923	,0115
XXIII	30	1 + ,0108 + ,991	,0041

In which s,—if the above error of 4'' in the Palermo Latitude be admitted, = +, "0595,

Examining column No. 1, we find a pretty regular determination to + and —, which cannot possibly arise from accident; we notice—that any small correction for error of Precession, such as found at page exix,—since it interferes in no respect with the general tendency of the numbers, it may be applied or not, at pleasure; to be consistent however, it will be proper to apply the

correction due to an alteration of, "041 in the General Precession as found at page cxix; viz, ",0150 cos. A. R.: thus No. 2. If we now divide the line A, B, Fig. 1 into 24 equal parts, to represent hours of A. R., and making use of any convenient scale—set off opposite to 0h. 30m. 1h. 30m. &c. the perpendiculars a 1, a 2, &c. corresponding to the values given in the table at page cxix, and perform the same for the above table; we get two series of lines 1, 2, 3, and 1, 2, 3, exhibiting in the first instance, the observed annual Proper Motion in A. R., of Stars supposed to be situated at 0h. 30m. 1h. 30m. &c. of Right Ascension, and at a distance of 75° from the North Pole; and in the second case, exhibiting the nature of the annual P. M. of the same Stars in declination, but not its extent. If we now with freedom draw a curve line through each of these series of points, conforming as nearly with them as is consistent with the character of a curve; we shall by measuring the ordinates, obtain corrected values of the Proper Motion, thus

Corrected Proper Motion.

in	A. R.	in arc in	Declination.
h.	m.	*	•
0	30	+ ,0312	s,0100
I	30	+ ,0250	-,0070
H	30	+,0180	-,0020
H	30	+ ,0135	+,0040
1V	30	+,0060	+ ,0100
¥	<b>30</b>	,0035	+ ,0145
VI	30	,0110	+ ,0180
VII	30	,0160	+ ,0190
VIII	30	,0175	+ ,0180
IX	30	,0190	+ ,0170
X	30	,0200	+,0145
ΧI	30	,0210	+ ,0115
XII	30	,0210	+ ,0080
XIII	30	,0200	+,0040
X1V	30	,0190	-,0015
XV	30	,0180	,0065
· XVI	30	,0158	
XVII	30	,0115	,0145
XVIII	30	,0045	-,0175
XIX	30	+ ,0067	,0195
XX	<b>3</b> 0	+ ,0163	<b>—</b> ,0195
XXI	30	十 ,0240	<b>— ,0175</b>
XXII	<b>30</b>	+ ,0300	,0160
IIIXX	30	+ ,0820	-,0140

These numbers it will readily be admitted, have been arrived at in a legitimate way, and they are to all intents and purposes Proper Motions: since then it will not for a moment be contended that they represent "true" or actual Proper Motions of the Stars themselves, we will see how far the supposition of a motion of the Solar System in space will account for the several values;

for this purpose, on the centre P (fig. 3) with the chord of 75° describe a circle which divide into 24 equal parts, corresponding to the several points at which we have determined the Proper Motions: with reference to the P. M. in A. R. we find, that it arrives at O at about V and XIX hours; whereas to represent the effect of motion of the Solar System these points should be separated by 12 hours: let us then assume VI and XVIII to represent the zero points in A. R., and draw the line VI—XVIII: if we assume the point to which the motion of the Solar System is directed, to be situated any where in the direction P. XVIII, it will at once represent the nature of the above table for the A. R.: for the effect of advancing to any point N, being to increase the arc N. S. to N S' (in which S. S.' = M. sin. N S.) its effect at any point between 18h. and 6h, is to increase the Right Ascension, whereas at the corresponding points between 6h. and 18h. it causes a diminution to the like amount: examining these results, it appears on trial that no single value for M, will satisfy both of these tables; if we allow that Piazzi's Latitude has been correctly observed (and since writing the above, I find in the Nautical Almanac, from late observations an exact confirmation of the value assigned by Piazzi); then, the distance of the point N from P, comes out between 23° and 24°, a point which is sufficiently enough distinguished, as being the Pole of the Ecliptic: with regard to the Declination Proper Motions,—the very improbable result arrived at, at page cxxi from the mean of the whole 24 hours, teaches us—that little dependance can be placed upon individual results; and on examining different tables of refraction, it will be found, that the various corrections for temperature, which are given in one or other of these, offers a sufficient explanation for the want of agreement of the P. M. from the Declination observations with that found from the Right Ascensions. Since writing the above. on consulting the three several results of the table at page cxvi—instead of the mean which has hitherto been employed; I find that the determination to + and — maximum, is much more strongly marked in the first catalogue than it is in the second; and that the second is more strongly marked than the third:— Now this result is precisely the one which should obtain from a motion of the Solar System in space; for, on consulting the first catalogue (Vol. II.) it will be found to contain several stars of the first and second magnitudes, and a great many of the third and fourth &c. or it may be assumed that-

For the Cata	logue in Vol. II. t	he averag	e mag. = 5,4
	l1I.		=6,4
	lV.		=7.8

Although in individual instances,—the degree of brightness exhibited by the fixed stars cannot be assumed as a measure of their relative distances; still in large catalogues such as the above, it is natural to suppose that—taken en masse, those are nearest to us which are the brightest; hence the stars in Vol. II. from being brighter—nearer to us—should render a movement of the Solar System in space more apparent than those given in Vol. III or IV: with this view of the subject, the anomalies met with at pages cxxi and cxxii, (where the P. M. in Declination from the three catalogues gave S = 3'', 61 and Piazzi's Latitude above 4'' in error) are fully explained and accounted for: and for the present it may be assumed—that the Solar System is in motion in space, and that its motion is directed towards the North Pole of the Ecliptic; and, exhibiting in the fixed Stars with reference to their average distance (if such an expression can be tolerated),—an annual change of place in Latitude, to the amount +'',059 cos. Lat. of the Star.

### SUPPLIMENTARY OBSERVATIONS AND MEMORANDA.

In the ordinary course of Observing and computing, it often happened—that an appearance different from ordinary, an error, an omission, or a discordance of some kind or other—has offered, which it was desirable should be placed on record, or, that the matter if doubtful, should on a subsequent occasion be re-examined &c.—in either of these cases the observing or computing books not offering sufficient accommodation for remarks, and in some cases being in-appropriate,—I have been in the habit of entering into a memorandum book, these circumstances &c. as they have occurred, and in the course of printing, when opportunity has offered—I have availed myself of its contents;—several of these memoranda which still remain, are for my own private, information and guidance, whilst others again—appear to belong to this work: such as they are, I have thought it best to give them here in the rough manner and order in which they have been made, thus—

#### Memoranda &c.

I. Re-examined the N. P. D. of 40 Lyncis r which exhibits a strange disagreement when compared with the Greenwhich place—thus

	_			Reduced to J	an.	1, 1835.
		_		•	,	*
Greenwhich p	lace from observ	vations in	1825	54	<b>54</b>	52,76
Madras			1831			<i>5</i> 8,20
	-		1832			57,45
			1833			<b>57,</b> 38
		Jan.	1835			

### SUPPLIMENTARY OBSERVATIONS &c.

		0 / 4	
1836	March 26	<b>54 55</b> 12,01)	
	April 13	10,61 \$ 1836	56,25
	<del></del> 16	10,59	•
1837	Feb. 4	11,92	
	Feb. 4 18	12,08	
	March 6	11,73	
	7	12,76 \ 1837	<i>5</i> 7,53
	18	12,09	07,00
	19	12,32	
	20	12,84	
	April 13	12,47 J	

- II. No. 171 in II hours is preceded by another Star at 16 seconds, whereas Piazzi says at 12 seconds.
- III. No. 152 in IV hours:—Piazzi's Declination probably five minutes in error; examine this.
- IV. No. 64 in IX hours is not observed:—I looked for it on the 29th and 30th April 1837 (it being very clear), saw No. 65 but 64 had disappeared.
- V. No. 15 in XI hours:—It is very extraordinary that Piazzi has not noticed the star following this at 4—5 seconds, and 23\* to the North.
- VI. No. 154 in XII hours:—in Piazzi's Catalogue the A. R. is given 187° 36′ 50″,4; instead of 187° 39′ 50″,4 I imagine.
- VII. No. 39 in XIII hours:—Piazzi's Annual Precession is erroneous, hence the Right Ascension is probably so too.
- VIII. No. 25 in XIII hours:—Prazzi gives diff. Declination between this and the accompanying Star = 16",9 whereas from our obs. 1837 May 23 = 25",0 = 24 = 27",2
- X. No. 168 in XVIII hours:—On the 25th April 1837, I observed two stars here, 5' North and 0,60s. following.
- XI. No. 53 in XIX hours:—Piazzi says, "6",2 temporis alia 8,9 æ magnitud. praecedit, 3' ad Boream": it now in (1837) differs 7,8 seconds.
- XII. No. 106 in XIX hours.—May 3d 1837 I observed two stars here;
  Piazzi has not noticed this—

- XIII. No. 252 in XIX hours:—Two observations with the Transit give the A. R. 1m. or 15' different from Piazzi; in the Catalogue I have through inadvertence supposed our results to be erroneous; but this must be re-examined.
- XIV. No. 103 in XX hours:—Piazzi mentions a Star accompanying this, its place now is {A. R. 20h. 13m.19,98s.} January Dec. -6° 11′ 58″,25 } 1, 1836.
- XV. No. 221 in XX hours:—Piazzi says "8" temporis 6' ad austrum alia 8 æ magn. sequitur: I cannot find this Star, but have observed one 20 seconds preceding and 6' to the South—examine this again.
- XVI. No. 286 in XX hours:—This Star is not to be found in the place assigned from Piazzi's Catalogue; the nearest Star is 10—11 minutes of space distant.
- XVII. No. 42 in XX hours:—I re-examined the place of this Star on the 14th September in 1837, when the A. R. January 1, 1837 came out 20h. 4m. 37,94s. confirming the large P. M.—,330s. found in Vol. III.



### Errata in the present Volume.

```
Page 4 line 15 for observations read observation.

No. 183 Mag. 8 — 6

— Declin. No. Obs. 2 = 32",36 read 4 = 20",92

— P. M. for +,15 read —,12

1225 Log. d — +4, 5105 — 4, 5105
```

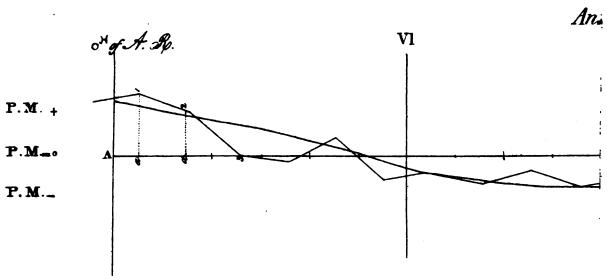
#### Additional Errata in Vol. II.

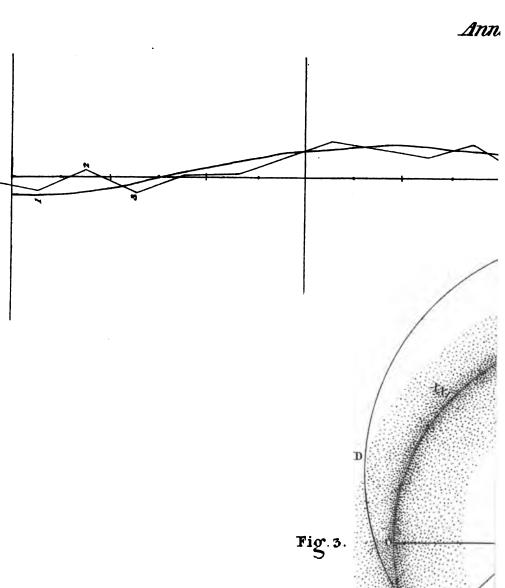
```
N. P. D.
                                          for 46",27
In the Catalogue No. 21
                                                          reud 43",27
                                            – 100° 51′
                                                           - 100° 52′
                     109
                                               4,833s.
                     147 Ann. Pre. A. R.
                                                               3,833s.
                     155
                                          -1h. 17m.
                                                           -1h.18m.
                     157
                                          - 1h. 18m.
                                                           -1h. 19m.
                     274
                                          - 2h. 2m.
                                                               2h. 28m.
                    701
                                          -5h.34m.
                                                               5h. 33m.
                    805
                                               45,70s.
                                                                        it was not obsd.
                                          - 60° 55'
                              N. P. D.
                                                                66° 53'
                    989
                                             102° 17′
                                                               102° 16′
                   1365
                   1540
                                              90° 27'
                                                                      - a wrong star.
                                                               110° 38′
                   1690
                                              110° 36′
                               A. R.
                   1968
                                                54,628.
                                                                 53,62.
                   2051
                                              17h. 46m.
                                                               17h. 47m.
                                                               18h. 13m. 36,32s.
                   2110
                                              18h. 12m.
                   2174
                                               26,32s.
                                              56° 32′
                                                                56° 39′
                             N. P. D.
                   2455
                               A. R.
                                              52,95s.
                   2456
                                                                29,19s.
```

#### Additional Errata in Vol. III.

```
In the Catalogue at pages xx, xxvi, xxxii, xxxiv, xxxviii and xliv, correct the date to 1835.
              No. 69
                              A. R. for 16,54s. read 17,54s.
                    98
                                             9,09s.
                                                      -11,07s.
                                           4,41s.
55° 69
                   403
                                                            1,10s.
                                                       - 56° 55
                   436
                                                       -53,60s. & P. M. = +,009s.
                                            58,873.
                   718
                                                       -40,75s. & P. M. = ,000s.
                    746
                                            44,23s.
                                                       -41,85s. & P. M. = 0.078s.
                                            41,28s.
                    827
                   838 Piaz. No.
                                             329
                                                            332
                              Declin. — 1=34,85 — 19'',44 & correct P. M. = -0'',48
Declin. — +'',08 — +0'',37
A. R. — -,108s. — +,001
                  *838
                   841 P. M. Declin. —
                   980 -
                            - A. R.
                                               783s. — 8,54s.
                   993
                  1109 P.M.
                                              -,057s. —
                                                           ,000s.
                                             -,116s. -- ,023s.
49,17s. -- 49,69s.
19,09s. -- 19,75s.
                  1162 P.M.
                              A. R.
                  1655
                  1660
                  2096 Log.
                               C
                                      for-
                                           -0,6218 read + 0,6218.
                                             13,15s. — 13,14s.
51,75s. — 5?,14s.
14°30′ — 16°30′
                              Declin. —
                  2193
                  2221
                              A. R. —
                  2452
                              Declin. -
                  2453
                                            Cancel the result.
                  2528 P.M. in A.R. —
                                             -,140 - -,330
```

<sup>•</sup> This however must be re-examined.





g.3.

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10-00

